

# NAVY TACTICAL REFERENCE PUBLICATION

# NAVY SUPPLEMENT TO THE DOD DICTIONARY OF MILITARY AND ASSOCIATED TERMS NTRP 1-02

EDITION AUGUST 2006

DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS

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R. T. NOLAN

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2. The terminology in this publication supplements Joint Publication 1-02 (JP 1-02), Department of Defense Dictionary of Military and Associated Terms. It establishes and standardizes the professional language used in the Navy Warfare Library (NWL).
3. Terms found in JP 1-02 are not contained within this publication unless their definitions differ from the Navy usage nor are terms that are adequately defined in a standard collegiate dictionary.
4. While NTRP 1-02 draws heavily from NWL publication glossaries, it is not an NWL master glossary. Terms defined in this publication also come from the main body text of NWL publications that do not have glossaries and from widely used allied publications. Terms with a narrow or limited applicability are not included, nor are specialist terms that are defined in authoritative Navy and non-Navy technical documents and directives.
5. The terminology of NTRP 1-02 is to be adhered to unless a distinctly different context of the application is intended.

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# PREFACE

NTRP 1-02, Navy Supplement to the DOD Dictionary of Military and Associated Terms, establishes and standardizes the professional language used in the Navy Warfare Library. It applies to users of all Navy Warfare Library publications — especially to those who develop them and teach from them.

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When items for changes are considered urgent, send this information by message to NWDC. Clearly identify and justify both the proposed change and its urgency. Information addressees should comment as appropriate. See accompanying sample for urgent change recommendation format on page 11.

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Submit routine recommended changes to this publication at any time by using the accompanying routine change recommendation letter format on page 12 and mailing it to the address below or posting the recommendation on the NWDC Doctrine Discussion Group site.

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## **CHANGE BARS**

Revised text is indicated by a black vertical line in the outside margin of the page, like the one printed next to this paragraph. The change bar indicates added or restated information. A change bar in the margin adjacent to the chapter number and title indicates a new or completely revised chapter.

## **WARNINGS, CAUTIONS, AND NOTES**

The following definitions apply to warnings, cautions, and notes used in this manual:



### **WARNING**

An operating procedure, practice, or condition that may result in injury or death if not carefully observed or followed.



### **CAUTION**

An operating procedure, practice, or condition that may result in damage to equipment if not carefully observed or followed.

### **Note**

An operating procedure, practice, or condition that requires emphasis.

## **WORDING**

Word usage and intended meaning throughout this publication is as follows:

“Shall” indicates the application of a procedure is mandatory.

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ENCL: (List Attached Tables, Figures, Etc.)

1. The following changes are recommended for NTTP X-XX, Rev. X, Change X:

a. CHANGE: (Page 1-1, Paragraph 1.1.1, Line 1)  
Replace "...the ~~National Command Authority~~ President and Secretary of Defense establishes procedures for the..."  
REASON: SECNAVINST #####, dated ####, instructing the term "National Command Authority" be replaced with "President and Secretary of Defense."

b. ADD: (Page 2-1, Paragraph 2.2, Line 4)  
Add sentence at end of paragraph "See Figure 2-1."  
REASON: Sentence will refer reader to enclosed illustration.  
Add Figure 2-1 (see enclosure) where appropriate.  
REASON: Enclosed figure helps clarify text in paragraph 2.2.

c. DELETE: (Page 4-2, Paragraph 4.2.2, Line 3)  
Remove "Navy Tactical Support Activity."  
"...the Naval War College, ~~Navy Tactical Support Activity~~, and the Navy Warfare Development Command are responsible for..."  
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Routine Change Recommendation Letter Format

# CHAPTER 1

## Introduction

NTRP 1-02, Navy Supplement to the DOD Dictionary of Military and Associated Terms, (formerly NWP 1-02), establishes and standardizes the professional language of the U.S. Navy by defining the terminology, acronyms, and abbreviations used in Navy Warfare Library publications. NTRP 1-02 supplements Joint Publication 1-02 (JP 1-02), Department of Defense Dictionary of Military and Associated Terms. The vocabulary established by NTRP 1-02 should be used without alteration unless a distinctly different connotation is intended.

Chapter 2 establishes standard definitions for Navy terms. It does not include terms defined by JP 1-02 unless Navy usage has a markedly different context or meaning. Terms that are adequately defined by or that have definitions that can be derived from a standard collegiate dictionary are not included, nor are terms that have a very narrow, technical application that is described in technical directives and manuals. In short, NTRP 1-02 is not simply a compilation of Navy Warfare Library publication glossaries.

Chapter 3 establishes standard meanings for the most commonly used acronyms and abbreviations found in Navy Warfare Library publications and should be used as defined unless a distinctly different connotation is intended. Guidelines for using acronyms and abbreviations are provided in Appendix A of NTRP 1-02, Navy Warfare Library. As a general rule, abbreviations defined in JP 1-02 or standard collegiate dictionaries are not included in NTRP 1-02.

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## CHAPTER 2

# Terms and Definitions

**absolute accuracy.** For GPS and precision-guided munitions, the degree of closeness of a measured or computed position of a point on the Earth's surface with respect to its true position based on a standard model of the Earth.

**absorption.** In underwater acoustics, the reduction of sound intensity caused by the conversion of sound energy into heat as it passes through water.

**acceptable risk.** The portion of identified risk that is allowed to persist without further controls.

**acceptable strike impact perimeter.** A boundary determined (on imagery and/or grid reference numbers relating to other intelligence products) by the tasking agency that identifies the acceptable zone where the impact of weapons should cause no unacceptable collateral damage.

**accompaniment.** A system whereby merchant ships due to transit a shipping risk area are gathered together and then transit the area, or that part of it which is considered particularly dangerous, in company with a warship or warships, but without formal convoy organization.

**accuracy.** In relation to GPS and precision-guided munitions, the degree of conformity with a standard or the degree of perfection attained in a measurement. Accuracy relates to the quality of a result, and it is distinguished from precision, which relates to the quality of the operation by which the result is obtained.

**acoustic advantage.** A situation that exists when the probability of own-ship gaining initial detection is greater than that of an opposing threat, expressed in terms of percentage of probability of first detection.

**acoustic disadvantage.** A situation that exists when the probability of own-ship gaining initial detection is less than that of an opposing threat, expressed in terms of percentage of probability of first detection.

**acoustic noise.** A general term referring to any undesired sound within a frequency band under scrutiny. Also see ambient noise, background noise, and self-noise.

**acoustic protective measures (APM).** That division of acoustic warfare involving actions taken to ensure friendly effective use of the underwater acoustic spectrum, despite the enemy's use of acoustic energy. APM involve antiacoustic warfare support measures and antiacoustic countermeasures, and may not involve underwater acoustic emissions.

**acoustic screen.** A blanket of air bubbles that entraps backscattered sound energy.

**acoustic signature.** 1. The noise output characteristic of, and identified with, a specific noise source (for example, the noise output of a particular class of submarine). 2. In mine warfare, the characteristic pattern of the target's acoustic influence as detected by the mine.

**active acoustic mine.** A mine actuated by the reflection from a target of an acoustic-ranging signal emitted by the mine.

**active desmoking.** Removing smoke and heat from the smoke control zone between the inner smoke boundary and outer smoke boundary prior to extinguishing the fire to aid firefighting efforts and reduce smoke spread in the ship.

**active mine countermeasures.** Use of ships, aircraft, systems, and personnel to locate and neutralize mines. Active mine countermeasures are divided into two categories: minehunting and minesweeping.

**active sonar.** Method of detecting or tracking underwater or surface vessels by processing the echo of a transmitted signal reflected from the target.

**actuation counter.** An antisweep device used in naval mines to delay firing of the detonator until the firing mechanism has operated a predetermined number of times. Also called ship counter.

**actuation level.** The minimum influence signal level needed to actuate a mine. The level of intensity and the duration of time that the influence field must be applied to satisfy the firing circuit requirements of the mine.

**actuation probability.** In naval mine warfare, the average probability of a given mine type being actuated by one run of the sweep within the actuation width.

**actuation probability area.** A horizontal plane area within which the sweeper-sweep combination will intercept an armed mine or its appendages with the necessary condition to cause a buoyant mine's mooring to be cut, a contact mine to be fired, or an influence mine to be actuated.

**actuation width.** The total area under an actuation curve to include the path width over which mines can be actuated. Also called the average firing width.

**acute radiation syndrome.** A combination of clinical syndromes occurring in stages, during a period of hours to weeks after exposure, as radiation injury to various tissues and organs is expressed.

**administrative group.** In an amphibious operation, the agency responsible for administrative and special details in the objective area, to include repair and salvage; hydrographic surveys; laying of nets, buoys, and beacons; initial harbor development and control; port control; boat pools; mail; and other tasks as assigned.

**administrative plan.** In an amphibious operation, a plan normally relating to and complementing the operation plan or order that provides information and instructions covering the logistic and administrative support of the operation.

**advance.** In maneuvering a ship, the distance gained in the direction of the original course when turning. Also see transfer.

**advance base.** See "advanced base" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**advanced base functional component (ABFC).** A grouping of personnel, facilities, equipment, supplies, and materiel designed to perform a specific function or accomplish a mission at an advanced base.

**advanced range.** Present range combined with corrections and predictions necessary to compensate for own-ship and target motion during time of flight, plus ballistic corrections and spots.

**advanced traceability and control.** A closed-loop, transportation hub-and-spoke operation for the collection and consolidation of depot level repairables that are received from fleet customers and technically screened for repair, stowage, or disposal and then shipped to the appropriate site.

**advance party.** A task organization formed by the Marine air-ground task force commander that consists of personnel designated to form the nucleus of arrival and assembly organizations in support of maritime



prepositioning force operations, amphibious embarkation, or contingency or training deployments. The primary task of the advance party is to arrange for the reception of the main body.

**advance tactical support base (ATSB).** A base located in an area of operations for the purpose of providing support for the craft and forces operating in the forward area. Base planning and construction is such that it can be moved to another location with minimum difficulty in the event that the area of operation shifts. An ATSB normally has a minimum craft repair capability, fuel, ammunition, water, food, and medical facilities.

**advisory control.** A mode of control under which the aircraft commander selects speed, altitude, and heading and has freedom of action to accomplish the assigned task. The aircraft control unit informs the aircraft of the current tactical situation and provides adequate warnings of hazards affecting aircraft safety. The aircraft commander is responsible for the aircraft's navigation and collision avoidance. Also see positive control in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>.

**aerial port of debarkation (APOD).** A station that serves as an authorized port to process and clear aircraft and other traffic for entrance to the country where located. Also see "port of debarkation" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**aerial port of embarkation (APOE).** A station that serves as an authorized port to process and clear aircraft and traffic for departure from the country where located. Also see "port of embarkation" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**aeromedical evacuation certification.** The culmination of processes to assure that a piece of equipment will perform as specified during the stresses of flight without jeopardizing the safe operation of the aircraft.

**aeromedical staging facility.** A medical facility located on or near an air base (or airstrip) to receive, administratively support, process, transport (on the ground), feed, and provide health care for patients entering, in the midst of, or leaving an aeromedical evacuation system.

**aerospace position.** In SAR, the position of a distressed aircraft or spacecraft at the time of reentry, engine failure, aircrew ejection, or bailout.

**aerospace trajectory drift.** In SAR, that drift caused by bailout trajectory or by glide of a disabled aircraft.

**afloat ammunition allowance lists.** Also known as "30,000 Series" allowance lists. Prescribes ammunition load capacity by line item/naval ammunition logistics code for individual ships/ship classes.

**afloat planning system (APS).** A Tomahawk mission planning and distribution site installed onboard selected aircraft carriers.

**afternoon effect.** The solar heating of the surface water that causes shallow negative temperature gradients. This results in downward refraction of sound rays and reduced surface duct ranges.

**aggressor vessel.** In harbor defense, any vessel that manifests a hostile intent against persons, facilities, or the marine environment located within the harbor defense commander's area of operations. This definition may fit any vessel regardless of the country of registry, ownership, charter, or crew makeup.

**air cargo company.** A Navy unit tasked with establishing and operating an overseas air cargo terminal in an expeditionary environment.

**air defense commander (ADC).** In the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for defensive counterair and granted the tactical control authority to accomplish the assigned missions and tasks.

**air plan.** The daily flight plan for carrier operations, including takeoff and recovery times, and fuel and ordnance requirements.

**air resources element coordinator (AREC).** In the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for management and coordination of fixed wing air and carrier-based helicopter assets.

**air search attack unit.** A search attack unit composed entirely of aircraft. Also see "antisubmarine air search attack unit" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**air threat environment.** The condition(s) that relates to the enemy's air defense capability against airborne friendly aircraft. There are three general levels of air threat environment: 1. low - An air threat environment that permits combat operations and support to proceed without prohibitive interference. Associated tactics and techniques do not formally require extraordinary measures for preplanned or immediate support. Target/objective engagement is enhanced by effective communications, accurate target/objective identification, and reattacks if applicable (limited only by aircraft time on station and ordnance on board). 2. medium - An air threat environment in which the specific aircraft performance and weapon systems capability allow acceptable exposure time to enemy air defenses. This air threat environment restricts the flexibility of tactics in the immediate target/objective area. It is an environment in which the enemy may have limited radar and/or electro-optical acquisition capability at medium range, but the air defense system is not supported by fully integrated fire control systems. Medium air threat environments normally allow medium-altitude missions/attack deliveries with low probability of engagement by enemy air defenses. 3. high - An air threat environment created by an opposing force that possesses air defense combat power, including integrated fire control systems and electronic warfare capabilities that would seriously diminish the ability of friendly forces to provide necessary air support. This air threat environment might preclude missions such as immediate CAS, since the requirements for effective radio communications and coordination may not be possible. The high air threat environment may include but is not limited to command and control network; mobile and/or stationary surface-to-air missiles; early warning radars; electronic warfare; integrated (AAA) fire control systems; interceptor aircraft; and war-time reserve modes.

**airborne alert interdiction.** A type of interdiction mission characterized by the employment of air-to-ground aircraft from an airborne alert status against emerging or time-critical targets as directed by the appropriate command and control node or agency. Also see "interdiction" and "air interdiction" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**airborne mine countermeasures.** Mine countermeasures operations conducted from an aircraft platform to detect and reduce the effectiveness of or defeat the enemy's mining effort. It includes watching, spotting, hunting, sweeping, and destroying.

**airborne stores.** Items intended for carriage internally or externally by aircraft, including racks, launchers, adapters, and detachable pylons, which are not normally separated from the aircraft in flight, such as tanks, pods, nonexpendable training weapons, and targets.

**airborne weapons.** Items intended for carriage internally or externally by aircraft, which are normally separated from the aircraft in flight, such as missiles, rockets, bombs, mines, torpedoes, pyrotechnics, ammunition, and guns.

**aircraft control unit (ACU).** A unit with facilities and personnel, including controllers, that conducts aircraft control and exercises tactical control of aircraft or unit(s).

**aircraft intermediate maintenance department.** The department responsible for the check, test, repair, or manufacture of aeronautical components and support equipment for the supported aircraft.

**aircraft wreckage locator.** A record of all aircraft wreckage within a SAR area of responsibility. It consists of

a visual plot of each wreckage on a map and is referenced by number to an index file that contains pertinent data concerning the wreckage.

**airspace reservation.** During SAR missions, temporary air space or altitude reservations for the purpose of preventing unessential non-SAR aircraft from entering air space being used by aircraft for SAR operations. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**air-surface action group (ASAG).** A unit comprised of two or more aircraft of the same type assigned to counter a particular surface threat (when only helicopters are used, it is known as a helicopter action group (HAG)).

**alert notice.** See “search and rescue incident classification” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**alert phase.** See “search and rescue incident classification” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**alert state.** The maximum time in minutes required to bring an aircraft or weapons system (or part of it) to immediate availability.

**alien migrant interdiction operations.** Civil or military actions taken to prevent alien migrants from illegally entering the U.S.

**alternate aim point.** A command that may be planned into a Tomahawk mission as a measure to lower the risk of collateral damage if the accuracy of the missile’s navigational solution is below the level of confidence required for the mission.

**altitude line.** Heavy band of clutter produced by radar energy reflection from the Earth’s surface.

**ambient limited speed.** For a ship or submarine platform, the slowest recommended search speed. At this speed or slower, acoustic detection ranges are limited by the ambient noise in the environment and not by the platform’s self noise. (This occurs at the speed where self-noise = ambient noise - 6 dB.) Also see break point speed.

**ambient noise.** The naturally occurring noise in the sea and the noise resulting from human activities but excluding self-noise and reverberation.

**ammi pontoon.** A pontoon designed to be used singly or as interconnected multiple units to form floating or elevated piers and causeways. The ammi pontoon can be elevated on tubular steel legs. The individual pontoon also can be used as a self-propelled fuel or water barge, warping tug, or ferry.

**amphibious bulk liquid transfer system (ABLTS).** Ship system used to pump bulk petroleum, oils, and lubricants, and potable water ashore via buoyant hose line.

**amphibious ready group.** A command within the amphibious force, consisting of the commander and his staff, designed to exercise operational command of assigned units in executing all phases of a division-size amphibious operation.

**anchor chain collar.** A circular device that rides down the anchor chain. It has a retrieving line attached by which the collar can be returned to the water’s surface. This device is used to permit periodic checking of the anchor chain to ensure that an explosive device has not been attached to the anchor chain by an attack swimmer. After each inspection, the collar is lowered to the bottom.

**anechoic coating.** A hull coating that absorbs sound. This coating reduces the amount of internally generated noise reaching the water and also reduces the active sonar reflectivity of the hull.

**angle of climb (dive).** The vertical angle between the horizontal and the direction of motion of a target measured in degrees at the target.

**angle on the bow.** The angle between the fore- and aft-axis of a target and the line of sight, measured from the target bow to starboard or port. Also see aspect, target angle.

**antenna sweep.** A shallow water wire sweep configuration that actuates the mine by contact with the antenna.

**antiair warfare (AAW).** 1. See “air defense” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>. 2. Measures taken to defend a maritime force against attacks by airborne weapons launched from aircraft, ships, submarines, and land-based sites.

**anticountermeasure device.** A device fitted in a mine to prevent its actuation by shock from a nearby explosion.

**anti-invasion mine.** A mine designed for use in the surf zone and very shallow water against landing craft, fast patrol boats, surface effect vehicles, and other amphibious assault vehicles.

**antimine countermeasures vehicle mine.** A mine that is laid, or whose mechanism is designed or adjusted, with the specific object of damaging mine countermeasure vehicles.

**antisubmarine evasion.** A change in the planned route or speed (but not destination) of a force, convoy, or independent unit ordered by the officer in tactical command to evade a submarine threat.

**antisubmarine minefield.** A field laid specifically against submarines. It may be unsafe for all vehicles or it may be deep and safe for surface vessels to cross.

**antisubmarine warfare commander (ASWC).** In the composite warfare commander concept, the officer delegated some or all of the officer in tactical command’s detailed responsibilities for ASW and granted the tactical control authority to accomplish the assigned missions and tasks.

**antisubmarine warfare-free area.** A waterspace management area in which no friendly submarines are operating, and there are no restrictions on the use of antisubmarine weapons.

**antiterrorism officer.** The point of contact directly responsible to the commanding officer for all matters dealing with antiterrorism and force protection. Formerly “force protection officer.”

**antiterrorism plan.** A plan that documents the specific measures taken to establish and maintain an antiterrorism/force protection program, ensuring readiness against terrorist attacks.

**approach route.** In mine warfare, a sea route that joins a port to the coastal or transit route.

**area fire.** A volume of fire delivered on a prescribed area. The term is applicable regardless of the tactical purpose of the fire, but area fire is generally neutralization fire.

**area of operations (AO).** In Navy usage, an operational area defined by the naval commander for own-force operations. The area of operations should be large enough for commanders to accomplish their missions and protect their forces. See also DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**area of uncertainty (AOU).** The area centered on the most likely contact position at time of detection in which the contact is believed to be at a specified level of probability. It is usually an ellipse and is sized to reflect the uncertainty of that position and report.

**area religious ministry coordination team.** A team designed to identify religious ministry (RM) requirements in a geographic area and to develop strategies to enhance mission efficiency and effectiveness. The team expands the command religious program to encompass commands without assigned religious ministry teams to

ensure that RM tasks and activities are planned, programmed, budgeted, and implemented to meet the identified RM requirements of the geographical area.

**area search detachment.** In explosive ordnance disposal (EOD) operations, an EOD detachment that uses a side-scanning sonar to reacquire mine-like contacts already located by other means.

**armed helicopter escort.** A helicopter armed for suppressive fire and flown in support of transport helicopters, utility helicopters, motorized or troop convoys, and other missions to which they may be assigned.

**arming delay.** The time interval between the instant ordnance is launched and the instant the fuze becomes armed.

**arming device.** A safety mechanism that interrupts the primary explosive firing train until a unique combination of environments is satisfied.

**array.** A group of two or more hydrophones arranged to provide a variation of reception with direction when beamformed. Also see phased array radar.

**arrival and assembly area.** An area designated by the maritime prepositioning force commander in coordination with the unified commander and host nation for arrival, offload, and assembly of forces and maritime prepositioned equipment and supplies, and for preparations for subsequent operations. The area is administrative in nature and does not denote command of a geographic area. Such an area may be inside an amphibious objective area. Within the arrival and assembly area, coordination authority for the following is implied for the maritime prepositioning force commander: a) prioritization and use of airfield(s), port, beach facilities, and road networks, b) air traffic control, and c) logistics support activities.

**arrival and assembly operations element.** An agency in each Marine air-ground task force element and the naval support element that coordinates the logistics functions of the offload of maritime prepositioned equipment and supplies and the arrival and assembly of forces.

**arrival and assembly operations group.** A staff agency of the Marine air-ground task force (MAGTF), composed of personnel from the MAGTF and a liaison from the naval support element, that controls the arrival and assembly operations.

**aspect.** The angle between the fore- and aft-axis of a target and the line of sight, measured from the target heading to starboard or port. May be expressed in general terms, e.g., bow, broad bow, beam, quarter, and stern. Also see angle on the bow, target angle.

**assault force.** In Navy special operations, a group of assault teams and a command and control element whose primary mission is to gain entry to the crisis point and secure the release of hostages and/or equipment by eliminating the threat through the selective use of force.

**associated support.** In Navy usage, operations in which a designated unit operates independently of a specified force or group but is tasked to provide contact information to, receive intelligence from and, if authorized, to cooperate and coordinate operations with the supported force. Tactical control of the unit remains with the assigning authority who coordinates tasking and movement of the unit in response to the requirements of the supported force commander.

**asymmetrical mine countermeasure gear.** Any mine countermeasure gear whose center of actuation, influence, detection, or cutting is displaced from the centerline of the platform.

**attenuation.** In underwater acoustics, the reduction in sound intensity (dB/kyd) caused by the absorption and scattering of sound in water.



**attrition mine countermeasure operations.** The continuous application of mine countermeasures to keep the risk from mines to all vehicles as low as possible where traffic is to continue for a sustained period. These operations are appropriate against minefields that are being replenished.

**attrition objective.** In mine countermeasures, the goal of keeping the threat of mines to ship traffic as low as possible when traffic must continue to transit the mined waters for a comparatively long period of time, and the mines cannot be cleared in a short time because of factors such as replenishment, mine mechanisms with delayed arming, or high ship count settings.

**attrition warfare.** The application of overwhelming combat power that reduces the effectiveness of an enemy's ability to fight through the loss of personnel and material.

**authority.** The person vested with the power to make decisions and issue orders; also, the individual power to make decisions and issue relative orders imposing those decisions – such power may be limited in scope, time, and location. Authority automatically confers the responsibility to carry out assigned tasks and report results to the assigning authority.

**auxiliary machinery.** In acoustic prediction usage, all machinery not directly associated with the main propulsion drive train, especially shipboard machinery that does not vary in rotational speed as the ship changes speed. Examples include: ship's service turbo generator, main feed pumps, air-compressors, trim drain pumps, etc.

**average actuation area.** The integral, over a plane perpendicular to the centerline of the target ship, of the probability of actuation of a mine under specified conditions.

**average actuation width.** The integral, over an athwartship distance between the mine and the keel of the target ship, of the probability of actuation of a mine at a given depth and under specified conditions.

**average firing width.** See actuation width.

**average power.** When applied to pulse radars utilizing a single transmitted pulse-per-pulse repetition period, the product of the peak power transmitted and the duty cycle of the pulse. The average power is usually defined as that existing over a single-pulse repetition period of a radar.

**average sea current.** That current present in the open sea that is caused by factors other than local winds. Found by using HO 700, Atlas of Surface Currents, pilot charts, and/or local knowledge.

**awareness stage.** That stage when the SAR system becomes aware of an incident.

**azimuth.** As related to GPS, the angle measured clockwise in the horizontal plane between the North Pole and the observed terrestrial object. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**background noise.** In acoustics, all unwanted sounds, other than reverberation, received by a hydrophone. It includes ambient and self-made noise.

**backload.** The process of putting returning personnel and/or vehicles and their associated stores and equipment into ships and/or aircraft; such personnel and equipment having been once embarked in ships and/or aircraft and used to support operations ashore. Also see "embarkation" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>.

**backscatter.** In underwater acoustics, that part of the reflected sound energy that returns to the transducer; equivalent to reverberation. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**baffle.** An acoustic shielding structure or partition that increases the transmission loss between two points. The baffle region refers to an acoustically blind area behind own-ship created by the physical relationship between the array and the ship hull.

**ballistic density.** A representation of the atmospheric density actually encountered by a projectile in flight expressed as a percentage of density according to the standard atmosphere. Thus, if the actual density distribution produced the same effect upon a projectile as the standard density distribution, the ballistic density would be 100 percent.

**band level.** The level of noise or signal in a specified frequency band.

**bareboat charter.** Under this type of contractual agreement, the ship owner relinquishes control and management of his ship to the charterer for a number of years — often for the ship's entire service life. The charterer crews and operates the ship and is responsible for all costs of operation, including fuel, port charges, and canal tolls. The charterer agrees to return the ship to the owner in good condition (normal wear and tear expected) when the charter party expires. The charterer pays "hire," which is usually expressed in terms of a certain amount of dollars per day or a certain dollar amount per dead weight ton per month.

**barrier line.** In ASW, the line formed by a series of static devices or mobile units arranged for the purpose of detecting, denying passage to, or destroying enemy submarines.

**base course.** A reference course or direction desired to be made good when evasive steering is being carried out.

**baseloaded.** A replenishing ship's cargo intended for delivery to a base or replenishment group.

**base recovery course.** The ship's magnetic heading for aircraft recovery.

**base speed.** The speed resulting along the base course when evasive steering is being carried out.

**basic allowance.** With regard to maritime prepositioning ship support of amphibious operations, the quantity of ammunition required to support a given number of weapons for a specified period of time. When used in relation to cargo offered for shipment (i.e., vehicles with basic allowance), it means that the vehicles are loaded with the ammunition necessary to support the unit involved.

**battle bill.** A list of stations to be manned under battle conditions and the personnel requirements for manning those stations.

**battle casualty.** Any casualty with an injury incurred as the direct result of hostile action, sustained in combat or sustained while going to or returning from a combat mission, provided that the occurrence was directly related to hostile action. Included are persons killed or wounded mistakenly or accidentally by friendly fire directed at a hostile force or what is thought to be a hostile force.

**battle force logistics coordinator (BFLC).** The logistic coordinator for a battle force who establishes a focal point for management and coordination of logistics to support operating forces. This organization is established when logistic coordination of two or more subordinate battle groups is required.

**battle messing.** The process by which personnel are fed onboard ships during periods of prolonged manning of battle stations in support of general quarters.

**battle rhythm.** See daily operations cycle.

**battle short.** A switch for short-circuiting the safety interlocks in most electronic equipment to supply power.

**battlespace.** All aspects of air, surface, and subsurface, land, space, and the electromagnetic spectrum that encompass the area of influence and area of interest. See also DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**battlespace awareness.** Awareness of the environment and the status of adversary and friendly forces, yielding an interactive “picture” that provides timely, relevant, and accurate assessments of friendly and adversary operations within the battlespace.

**battlespace dominance.** The degree of control over the dimensions of the battlespace that enhances friendly freedom of action and denies the enemy freedom of action. It permits power projection and force sustainment to accomplish the full range of potential missions.

**battlespace shaping.** The continual process of developing, evaluating, and revising the force operational profile within the battlespace. Provides the foundation of the force commander’s operational message within the battlespace.

**beach gear.** A direct pulling system used to free stranded vessels, consisting of an anchor connected to a pulling wire and purchase tackle used to heave against the holding anchor.

**beach party team.** The Navy component of the debark control unit responsible for controlling lighterage in the surf zone, conducting lighterage salvage, and transferring bulk liquids from maritime prepositioning ships.

**beamformer.** Equipment that forms bearing sectors around an array to permit association of a direction with an underwater acoustic signal.

**beam rider guidance.** That form of missile guidance wherein a missile, through a self-contained mechanism, automatically guides itself along an electronic beam.

**bearing rate.** The rate of change of target bearing from own ship caused by the relative motion of own ship and target. It is normally expressed in degrees per minute, left or right.

**bearing resolution.** The minimum angular separation between two targets at the same range that will allow an operator of a specific piece of electronic equipment to distinguish between the two targets.

**bearing sector.** A general bearing. If a target is known to be somewhere within plus or minus 15 degrees of a specific bearing, it is said to be within a 30-degree bearing sector.

**bellringer.** Any procedure or system for alerting a submarine.

**beset.** Situation of a vessel surrounded by ice (nipped) and unable to move.

**biologic.** Ambient sea noise of biological origin.

**bioluminescence.** The production of light without sensible heat by living organisms as a result of a chemical reaction either within certain cells or organs or in some form of secretion.

**bistatic.** Refers to the case in active sonar where the active source and the receiving hydrophone are separated. Also see monostatic and multistatic.

**black bottoms.** Refers to commercial cargo ships operated or leased by the Military Sealift Command to transport surge replenishment requirements in response to wartime or contingencies.

**blade rate.** The frequency of the pulsating thrust imparted by the shaft to the ship caused by the propeller moving through the wake profile of the ship.



**blind zone.** The area in which a radar or electronic countermeasure's equipment cannot receive echoes. Blind zones are normally caused by interference from a ship's superstructure.

**blockade.** A belligerent operation to prevent vessels and/or aircraft of all nations, enemy as well as neutral, from entering or exiting specified ports, airfields, or coastal areas belonging to, occupied by, or under the control of an enemy nation. A belligerent's purpose in establishing a blockade is to deny the enemy the use of enemy and neutral vessels or aircraft to transport personnel and goods to or from enemy territory.

**BLUE DART message.** A time-sensitive terrorist incident notification message initiated by the Navy Antiterrorist Alert Center to provide commands immediate indications and warning of the high potential for, and imminent threat of, a terrorist action.

**boarding ship.** In maritime interception operations, the unit tasked with providing the boarding team for boarding a suspect vessel.

**bottom bounce.** Sound transmission in which sound rays strike the bottom in deep water at steep angles and are reflected to the surface.

**bottom contours.** Lines of equal water depth used to depict bottom topography on bathymetric charts.

**bottom interaction.** Interaction of underwater sound with the ocean bottom, whether the sound is reflected from the sediment, or refracted through it, or both. At low frequencies, refraction may produce a focusing, somewhat similar to a convergence zone.

**bottom limited.** A situation that exists when the ocean bottom occurs at a depth less than the critical depth. Convergence zone propagation is prevented from occurring. Deep sound channel propagation is restricted to a deep source.

**bottom loss.** Acoustic energy lost on the sea floor as a result of attenuation; also, the ratio of the energy of a bottom-returned wave to the energy of the incident wave.

**bottom reverberation.** A term referring to scattered sound energy that is reflected back to the acoustic source after striking the ocean floor.

**bottom search.** An ASW search that is a particular application of the close search for use in shallow water and when the submarine is suspected to be on the bottom.

**bottom sweep.** A device, either wire or chain, used either to sweep moored mines close to the bottom or to remove moored mines from a channel by dragging them to a designated area. The sweep configuration may consist of one or two ships dragging the wire or chain across the seabed.

**bottom type.** A number which categorizes the ocean bottom with respect to acoustic properties. NAVOCEANO categorizes the bottom into nine classes for frequencies 1000 Hz and above; they are displayed on the ASW prediction area chart. Bassett and Wolff categorize the bottom into three classes for frequencies below 1000 Hz.

**boundary.** In underwater acoustics, a level at which a discontinuity exists, such as the ocean surface and ocean bottom. A boundary can also exist between different masses of ocean water, such as an ocean front, and between different thermal characteristics, such as a mixed-layer depth. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**bounded sea.** Any sea space surrounded by land with restricted entry and exit routes and limited operating space.

**break plane.** Referencing the vertical and horizontal planes of motion available to all aircraft. To break plane is to maneuver in vertical or horizontal planes other than those occupied by another aircraft.

**break point speed (BPS).** For a ship or submarine platform, the fastest recommended ASW search speed. At this speed or faster, acoustic detection ranges are limited by the platform's self-noise, and not by the ambient noise in the environment. (This occurs at the speed where self-noise = ambient noise.) See also ambient limited speed.

**breakthrough.** In mine countermeasures, a time-critical operation applied to the mine countermeasures tactic of minimizing the mine threat by creating a narrow path through a minefield to gain passage for ships.

**brightness.** The apparent luminosity of a subject due to the reflection of the illumination falling upon it. Measured in foot-lamberts.

**brisance.** The shattering power of an explosive; it is a measure of the kind of work an explosive will do and is usually dependent upon, and indicated by, the velocity of the explosive reaction.

**broadband.** Acoustic energy that is spread over a wide nondiscrete frequency band. Broadband signals cover a frequency range one-tenth octave or larger.

**broadband noise.** Noise from any source other than the measuring equipment and platform and covering a wide range of frequencies.

**broadcast control.** A form of aircraft mission control in which tactical and target information is passed to enable the aircraft to accomplish the assigned tasks. The controlling unit, when possible, provides adequate warnings of hazards, but the aircraft commander(s) is (are) responsible for aircraft navigation and collision avoidance. Two-way communications are not a prerequisite for this type of control. Also see close control and loose control.

**buffer zone.** In shipboard firefighting, the area between the inner and outer smoke boundaries established for a class-B fire in a machinery space. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**buried mine.** A mine that is partially or fully covered by bottom sediment.

**burnthrough.** The point where the echo is first discernible through the jamming. Also see "burn-through range" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**captain of the port (COTP).** The officer responsible for enforcing, within his/her jurisdictions, port safety, security, and marine environmental protection regulations including, without limitation, regulations for the protection and security of vessels, harbors, waterfront facilities, anchorages, security zones, safety zones, regulated navigation areas, deep-water ports, water pollution, and ports and waterways safety.

**cargo handling detachment (CHD).** A Navy support element (NSE) component consisting of U.S. Navy cargo handling force personnel assigned to the offload preparation party who are augmented by additional supervisory and technical NSE personnel to accomplish the offload.

**cargo handling force (CHF).** A Navy support element of the offload control unit consisting of U.S. Navy cargo handling force personnel assigned to the off-load preparation party and debarkation team.

**cargo load allowance list.** An approved listing of ordnance carried as cargo for underway replenishment for issue to other fleet units in support of their assigned mission.

**carrier-controlled approach (CCA).** A precision system using radar to pick up and detect carrier-based aircraft (operating under instrument flight conditions) to a position and course relative to a carrier from which recovery can be made.

**carrier onboard delivery (COD).** The delivery of passengers and/or light freight on-board an aircraft carrier at sea by carrier aircraft. Such aircraft are carrier type aircraft especially adapted for this purpose.

**cartridge-actuated devices/propellant-actuated devices.** Explosive devices used to eject stores from launched devices, actuate other explosive systems, provide initiation for aircrew escape devices, or provide seat propulsion.

**case depth.** The vertical distance from the water's surface to the planted mine. For moored mines, this is the water depth at which the explosive charge is held by the mooring line. For ground mines, the case depth is the same as the sea bottom depth.

**casualty distribution.** In naval mine warfare, the set of probabilities for every possible number of casualties out of N transit attempts, i.e., 40-percent probability of three casualties in ten transits.

**casualty rate.** In naval mine warfare, the expected number of casualties per time period in a sustained attrition mining campaign.

**casualty report.** An operational report submitted for casualties (including degradations) that affect a unit's assigned primary mission area when repairs of the equipment and/or related computer software are not possible within 48 hours. The report identifies casualty effects to the mission area, parts, technical assistance, and estimated repair time. Casualty reports are classified as initial, update, cancellation, or correction reports, which provide the operational and type commanders within the unit's chain of command its readiness status.

**catenary chain drag.** A technique used to sweep moored mines employing two ships or small craft towing a chain between them.

**caustic.** In a two-dimensional ray diagram, a caustic is a curve formed by the intersections of adjacent rays in the diagram. A focus occurs when a caustic degenerates to a point or a small region of space.

**cavitation.** The formation of local cavities (bubbles) in a liquid as a result of the reduction of total pressure. This pressure reduction may result from a negative pressure produced by rarefaction or from the reduction of pressure by hydrodynamic flow, such as that produced by high-speed movement of an underwater propeller.

**center frequency.** In underwater acoustics, the frequency in the middle of a bandwidth that is determined by taking the average of the sum of the upper limit and the lower limit.

**chain mooring.** An antisweep device consisting of a length of chain inserted in the mooring of a mine for the purpose of resisting or disrupting sweep wires and cutters.

**channel conditioning.** An operation that removes mine-like objects from channels, harbor approaches, and Q-routes to reduce the number of mine-like and nonmine-like bottom objects detectable by mine-hunting systems.

**channelization.** A tactic employed through the use of mines, obstacles, fires, or deception to influence the maneuver of a force across a predetermined path.

**chart.** A graphic representation of a section of the earth's surface specifically designed for navigational purposes.

**charter party.** In military sealift usage, a contractual agreement between a ship owner and a ship charterer.

**check MCM operation.** A mine countermeasures (MCM) operation to confirm that, as far as possible, no mines are left after a previous MCM effort. Also see "check sweeping" in DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**chemical horn.** An actuation mechanism for a contact mine. It consists of an external housing (which is easily bent or crushed and contains the sealed electrolyte tube) and internal battery plates connected to a detonator. When the horn is bent, the tube breaks and allows the electrolyte to activate the battery that passes a current to fire the detonator. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**choke point.** An oceanographic area where passage is restricted. An area considered easily defended or watched over.

**circle search.** An acoustic search pattern in which the torpedo searches in repeating circles until target detection or torpedo exhaustion.

**civic action team.** In Navy civil engineering usage, a team normally comprised of one Civil Engineer Corps officer, an independent duty hospital corpsman, and eleven Seabees.

**civil affairs.** The activities of a commander that establish, maintain, influence, or exploit relations between military forces and civil authorities, both governmental and nongovernmental, and the civilian populace in a friendly, neutral, or hostile area of operations in order to facilitate military operations and consolidate operational objectives. Civil affairs may include performance by military forces of activities and functions normally the responsibility of local government. These activities may occur prior to, during, or subsequent to other military actions. They may also occur, if directed, in the absence of other military operations. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**civil engineering.** Those activities that identify, plan, design, construct, alter, demolish, or lease facilities and that operate, maintain, perform war damage repair, and provide for their disposal in support of military operations. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**civil engineer support equipment.** Mobile construction, automotive, railway, firefighting, and weight handling equipment and associated items required to support the operating forces of the Navy, Marine Corps, and naval shore establishment in regard to shore facilities, transportation, and related engineering material and equipment.

**civil support.** Department of Defense support to United States civil authorities for domestic emergencies and for designated law enforcement and other agencies.

**classification.** The evaluation of a contact. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**classification signature.** The susceptibility to being classified as a submarine or warship by other platforms.

**classification, identification, and engagement area (CIEA).** In maritime operations, the area within the surveillance area and surrounding the vital area(s) in which all objects detected must be classified, identified, and monitored; and the ability maintained to escort, cover, or engage. Also see area of operations, surveillance area, vital area.

**clearance operations.** In naval mine warfare, the process of sweeping or hunting in a mined area with the aim of clearing all or a high percentage of mines from an area, channel, or route. A specific percentage of clearance is generally specified.

**clear-deck recovery.** In LAMPS helicopter operations, conventional landing on a RAST-equipped ship that does not use the hauldown cable or the RSD.

**cleared vessel.** In maritime interception operations (MIO), a suspect vessel that has been queried or boarded and has declared that its next port of call is in an area designated by the MIO sanctioning body and has been directed to proceed to the next port of call; or a suspect vessel outbound from an area designated by the MIO sanctioning body that has been queried and allowed to proceed to its next port of call.

**clearing objective.** In mine warfare operations, to remove most mines from the assigned operational area. Since it is generally impossible to guarantee that all mines are cleared, a goal is assigned, such as removing or neutralizing 99.5 percent of the mines.

**climatological conditions.** An average of environmental conditions over a specified period of time such as a calendar month, season, year, century, etc., for a specific geographic location (i.e., a climatological sound velocity profile would represent the average condition for a given area; anomalous conditions would not be reflected).

**clobber.** The unintentional impact of TLAM with a natural or manmade obstacle.

**close ASW action.** An action in which one or more ASW units attempts to engage an enemy submarine within 8,000 yards.

**close control.** A form of aircraft mission control in which the aircraft is continuously controlled for altitude, speed, and heading to a position from which the mission can be accomplished. See also broadcast control and loose control.

**closed-loop sweep.** A magnetic sweep in which the sweep current is carried entirely by insulated electrical conductors and does not depend upon seawater to complete the electrical circuit. The conductors are diverted to one or both sides using components of the Oropesa mechanical sweep.

**close search.** A search for a particular submarine employed when a lost contact search or procedure has failed to relocate the submarine or when time late is too great to permit use of a lost contact search.

**clutter.** In naval mine warfare, all echoes detected by a minehunting sonar system during the detection phase that are repeatedly above the noise or average reverberation background. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**clutter density.** The number of nonmine bottom objects per square nautical mile in an operational segment.

**coastal area.** An area that may include land, harbors, coastline, islands, territorial waters, and coastal waters, the seaward limits of which depend on geographical and operational factors and in which special regulations may apply.

**coastal route.** In naval mine warfare, a sea route, normally following the coastline, that joins adjacent approach routes.

**coastal sea control commander.** An officer designated by the naval coastal warfare commander to conduct surveillance and interdiction operations in the coastal area.

**coastal state.** A nation bordering ocean waters that has the authority under international law to exercise various degrees of sovereignty over the immediately adjacent ocean waters.

**coastal waters.** A sea area within a coastal area extending to seaward from the shore line.

**CODAG.** A combination power plant consisting of a diesel engine and a gas turbine configured so that both can be operated simultaneously. In a typical application, the diesel engine is used for normal cruise conditions while the gas turbine allows for high-speed operations.

**CODOG.** A combination power plant consisting of a diesel engine and a gas turbine configured for exclusive operations. The diesel engine is employed for normal operations. For high-speed operations, the diesel engine is secured, and the gas turbine is employed.



**COGAG.** A combination power plant consisting of gas turbines in which one turbine is employed for cruise economy, and a second larger turbine provides boost power.

**COGOG.** A combination of gas turbines in which one is used for cruise economy, and a second larger one provides boost power. It differs from a COGAG configuration in that the smaller turbine must be physically disengaged when the boost turbine is employed.

**cold core eddy.** Large cold water mass that has broken off from its parent water mass into a different water mass, yet retains its specific properties for long periods (up to two years) before being assimilated.

**collinearity.** In photogrammetry, the fundamental geometric principle that the point visible in the image, the exposure station of the camera, and the point on the ground lie along a single light ray.

**combat loading.** In amphibious operations, loading methods that give primary consideration to the facility with which troops, equipment, and supplies can be unloaded ready for combat rather than to economical use of ship space. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**combat logistics force.** Includes active Navy ships and those operated by the Military Sealift Command within the naval fleet auxiliary force that carry a broad range of stores, including fuel, food, repair parts, ammunition, and other essential materiel to keep naval forces operating at sea for extended periods.

**combat organization loading.** A method of loading conducted without regard to tactical considerations upon debarkation. It permits debarkation of complete units and equipment that will be available for tactical employment and assembly ashore. This method is more economical in ship space than is combat unit loading.

**combat requirement.** The quantity of munitions required to equip a specified force structure to its designed military capability and to meet CINC objectives, including munitions needed for overlap.

**combat spread loading.** A method of combat loading by which some of the troops, equipment, and initial supplies of a unit are loaded in one ship, and the remainder are loaded in one or more other ships. This method is commonly used for troop units with heavy equipment. Also see combat organization loading and combat unit loading.

**combat stress.** The mental, emotional, or physical tension, strain, or distress resulting from exposure to combat-related conditions. Combat stress is the net result of many stressors (e.g., fear of death, fear of failure, and other intensive painful emotions (like grief), uncertainty, boredom, worry about what is happening back home, and the many physical and mental demands of combat duties) at any given time.

**combat unit loading.** A method of loading by which all or a part of a combat unit, such as an assault battalion landing team, is completely loaded in a single ship with essential combat equipment and supplies in such a manner as to be immediately available to support the tactical plan upon debarkation and to provide a maximum of flexibility to meet possible changes in the tactical plan. Also see combat organization loading and combat spread loading.

**combat usable asset inventory.** The sum of the ready-for-issue and the emergency-combat-use only inventories.

**combined effect bomblet.** A fragmentation- and incendiary-shaped charge ejected by TLAM-D over one or more targets as ordered by the mission planner.

**command activated sonobuoy system.** An active ranging sonobuoy that may be turned on or off, scuttled, and hydrophone depth increased on command.

**common tactical picture (CTP).** The common tactical picture is derived from the common tactical dataset and other sources and refers to the current depiction of the battlespace for a single operation within a CINC's

area of responsibility including current, anticipated or projected, and planned disposition of hostile, neutral, and friendly forces as they pertain to U.S. and multinational operations ranging from peacetime through crisis and war. The CTP includes force location, real time and nonreal-time sensor information, and amplifying information such as METOC, SORTS, and JOPES.

**common-use sorties.** Those sorties tasked directly by the joint force air component commander in order to achieve the air objectives of the joint force commander campaign. They consist of all sorties not used as direct support.

**communications electronic operation instruction.** An instruction containing frequencies, circuit assignments, codes and ciphers, call signs, and authentication tables and their use.

**complement.** For a ship, the numbers, ranks, and ratings of officers and enlisted personnel determined to be necessary to accomplish the ship's wartime objectives.

**compliant boarding.** In maritime interception operations, a boarding in which all of the following are met: a) suspect vessel complies with the directions of the on-scene commander, b) no apparent passive or active resistance measures are employed, and c) there is no intelligence to indicate a threat.

**composite warfare commander (CWC).** An officer to whom the officer in tactical command of a naval task organization may delegate authority to conduct some or all of the offensive and defensive missions of the force.

**confined waters.** Parts of coastal waters where the freedom of movement of vessels is affected by the proximity of land or shallow waters.

**confirmed intelligence.** Information or intelligence reported by three independent sources. The test for independence is certainty that the information report of one source was not derived from either of the two other sources, usually resulting in reliance on original reporting.

**conformal array.** A group of hydrophones that follow the contour of the ship. Employed for passive application.

**conjugate depth.** For a source below the sonic layer depth, that depth below the deep sound channel axis where the sound speed equals the speed at the source depth.

**consensual boarding.** In maritime interception operations, boarding is conducted at the invitation of the master (or person-in-charge) of a vessel that is not otherwise subject to the jurisdiction of the boarding officer. The voluntary consent of the master permits the boarding, but it does not allow the assertion of law enforcement authority such as search and seizure.

**consensual visit.** In maritime interception operations, a visit conducted at the invitation of the master (or person-in-charge) of a vessel that is not otherwise subject to the jurisdiction of the boarding officer. The voluntary consent of the master permits the boarding, but it does not allow the assertion of law enforcement authority such as search and seizure. Also called consensual boarding.

**consequence management.** Interagency services and emergency response force actions essential to mitigate and recover from damage, loss, hardship, or suffering resulting from disasters or catastrophes, either man-made or natural. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**consigned merchant vessels.** Consigned merchant vessels are those vessels that governments or owners have formally placed under naval control.

**construction battalion unit (CBU).** A naval construction force unit that may be established in the fleet or in the shore establishment. Fleet CBUs fulfill long-term facilities improvement requirements at specific locations. Shore CBUs are used for construction, alteration, repair, and nonrecurring maintenance.

**consumables.** Administrative and housekeeping items, common tools, paints, cognizance symbol II forms, or any other items not specifically defined as equipment or repair parts. Materiel such as general-purpose hardware, metals, lumber, and lubricating oil also are considered to be consumables in procurement transactions but will be treated as repair parts in shipboard issue transactions when the materiel is to be used for accomplishing maintenance actions.

**contact.** In Navy operations, any discrete airborne, surface, or subsurface object detected by radar, sonar, and/or visual means. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**contact of interest (COI).** In maritime interception operations (MIO), a suspect vessel carrying nonmilitary supplies believed to be enroute to, or outbound from, a place specified by the MIO sanctioning body; or a suspect vessel flying the flag or under charter of a state specified by the MIO sanctioning body.

**continental margin.** A zone separating the emergent continents from the deep sea bottom; generally consists of the continental shelf, slope, and rise.

**continental rise.** A gentle slope with a generally smooth surface found between the continental slope and the abyssal plain.

**continental shelf.** A zone adjacent to a continent and extending from the low waterline to a depth at which there is a marked increase of bottom slope to greater depth (usually about the 100-fathom line).

**continental slope.** A zone from the outer edge of a continental shelf to the continental rise.

**contingency support shipping.** Shipping directly related to ongoing activities during a regional contingency operation. This may include crisis response shipping, government-controlled relief shipping, naval operating forces, and naval sealift shipping.

**continuous operations.** In the context of combat stress, military operations with many pulses of action every day and night, continuing for several days to weeks, which require careful planning and resource allocation to give everyone a minimum of four hours sleep in 24.

**contrast.** 1. The difference between highlights and shadows in a negative or print. 2. Brightness ratio between the target and its background in a scene.

**control.** The near-real-time direction of weapons systems and supporting platforms for the accomplishment of assigned missions. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**convection currents.** Whenever the surface water undergoes intensive cooling, evaporation, or freezing, the density of the surface water increases beyond that of the underlying water. As this denser water sinks to a level of the same density, currents are produced by warmer water flowing in to replace the sinking surface water.

**conventional ammunition.** A generic term that includes all types of nonnuclear/biological/chemical ordnance, such as bullets, rockets, bombs, mines, and guided missiles.

**convergence zone.** That region in the deep ocean where sound rays, refracted from the depths, return to the surface. They are focused at or near the surface in successive intervals. A convergence zone is a sound-transmission channel in the deep ocean [2,500 to 15,000 feet (850 to 4,500 meters)] produced by the combination of pressure and temperature changes.

**conversion.** 1. A one-to-one mapping between two coordinate systems that does not involve a change of datum. It is a rigorous mathematical function based on constants. 2. A permanent change of the functional use of a facility or space resulting in a category change to the real property record.



**coordinated ASW operations.** Those operations in which any combination of ships, fixed-wing aircraft, helicopters, and ASW submarines combine to search for, locate, and/or attack enemy submarines.

**coordinated strike.** A combined strike by TLAM and TACAIR in which success and survivability for each component are not dependent upon the success or time-on-target of the other component.

**coordinators.** Coordinators are asset and resource managers. They carry out the policies of the officer in tactical command or composite warfare commander, if assigned, and respond to the specific tasking of either principal or functional warfare commanders. Coordinators differ from warfare commanders in that coordinators execute policy but do not initiate autonomous actions nor do they normally exercise tactical control over assigned assets.

**core capability.** The set of functions that defines a significant, stand-alone, operationally effective and suitable military capability such that, should no further development occur, the user will have received a significant capability.

**core competencies.** Skills and knowledge considered fundamental to accomplishing stated capabilities.

**correlation.** The determination that a system track or local sensor track data report represents the same object or point as another track and/or the process of combining two such tracks/data under one track number.

**COSAG.** A combination power plant consisting of steam and gas turbines. For normal operations, the steam turbine is employed while a gas turbine provides boost power.

**counterdetection.** 1. A submarine's ability to acoustically detect a surface ship's radiated noise and echo ranging. 2. Detection of a tracking ship by a contact that is being tracked.

**countered field.** A minefield in which some level of mine countermeasures is undertaken by the enemy.

**counterfire attack.** An attack during which own-ship does not hold contact on the launch platform, only on an incoming torpedo.

**counterfire avoidance.** Actions taken by the ship, incident to the conduct of an attack, to move purposefully out of the expected path of counterfired weapon(s).

**countermarker.** A unit maintaining contact on a marker from a position that enables it to counter the threat presented by the marker.

**countermine.** In naval mine warfare, any means employed to prevent the enemy from laying mines to include destruction of mine stockpiles and platforms or the placement of mines in friendly waters to thwart the enemy's capability to deliver mines. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**countertargeting.** A tactic designed to delay or prevent enemy platforms from targeting friendly units.

**coupling system.** That system by which the drive system and the propulsion system are linked and by which the drive system imparts energy to the propulsion system.

**course.** The intended direction of movement in the horizontal plane.

**course line.** A sharp, clear line drawn on a map to denote the desired ground track.

**course made good.** The actual track made good in a given period of time, taking into account all effective environmental factors. Course made good over the ground is the direction in which a ship has proceeded, measured between two geographic positions. Course made good through the water is the direction in which the ship

is proceeding resulting from the effect of weather but not from the effect of current or tidal stream on the signaled or base course.

**cover.** Actions to conceal actual friendly intentions, capabilities, operations, and other activities by providing a plausible yet erroneous explanation of the observable.

**coverage factor.** In SAR, a measure of the search effectiveness or its quality. It equals sweep width divided by track spacing.

**crisis response shipping.** All shipping employed in support of allied military operations. It will include ships taken from trade, chartered shipping and, when appropriate, national maritime prepositioning ships.

**critical angle.** The grazing angle of a sound wave with the sea bottom at which total reflection occurs.

**critical contact of interest.** In maritime interception operations (MIO), a suspect vessel carrying designated contraband, such as military supplies or illegal drugs, believed to be enroute to or outbound from a place specified by the MIO sanctioning body; or a suspect vessel flying the flag or under charter of a state specified by the MIO sanctioning body.

**critical deficiency.** A deficiency that affects the operational ability of a unit to such an extent that performance of the exercise is below minimum standards. This deficiency might be one of material, personnel, or training, but remedial action is within the capability of assigned personnel.

**critical depth.** The depth below the deep sound channel (DSC) axis at which the sound speed is the same as it is at the sonic layer depth. The critical depth is the bottom of the DSC.

**critical vulnerability.** That element of a military force vulnerable to attack and whose degradation or destruction will lead to defeating the enemy's center of gravity and, ultimately, the will to resist.

**crossover patrol.** A patrol that begins on a barrier line and makes cross-channel tracks that slant away from the barrier line in the direction of target movement. Normally used when scouts have an appreciable speed advantage over the enemy.

**cryptologic resources coordinator.** The officer delegated some or all of the officer in tactical command's detailed responsibilities for management of cryptologic assets, cryptologic coverage and tasking plans, personnel and augmentation requirements, cryptologic direct support operations, signal security operations, special intelligence communications, direct service interfaces, cryptologic sanitation, and correlation procedures.

**cueing.** The capability to use contact information generated by analysis of sensed data from any sensor to enable another sensor system to gain contact.

**cultural competency.** The set of behaviors, attitudes, and policies that come together in an institution or agency, or among a group of individuals, that allows them to work effectively in cross-cultural situations. Cultural competency reinforces the need for understanding the core of another's beliefs and the ability to see the world through another's world view.

**cumulative probability of detection.** In SAR, a cumulated total probability of detection for repeated searches of the same area found by averaging the individual coverage factors for the completed searches to obtain a mean coverage factor. Abbreviated Pc.

**cutoff frequency.** That frequency below which an acoustic signal will tend not to be trapped in a layer or duct and is a function of the depth of the layer.

**cylindrical array.** A group of hydrophones employed for both active and passive detection.

**D/E ranging.** A method of estimating target range by measuring the arrival angle of acoustic energy reflected off the ocean bottom.

**daily operations cycle.** The schedule of significant recurring events of the JTF HQ staff. The JTF chief of staff normally establishes this to deconflict the JTF staff schedule. This schedule allows JTF staff members to anticipate when information is required and backward plan to ensure inputs are available when needed. Also called “battle rhythm.”

**damage distance.** In mine warfare, the athwartship range within which a mine must detonate in order to cause a specified level of damage to the target.

**damage level.** In mine warfare, the measure of desired danger. The four standard categories are kill, imminent loss likely, mission abort, and onboard repairs possible.

**damage width (Wd).** In mine warfare, the integral of the probability,  $P(y)$ , of actuation of a mine under specified conditions, integrated only over those values of athwartship distance ( $y$ ) for which the explosion of the mine is likely to do at least a specified amount of damage. This is the area under an actuation probability curve within the damage distances on each side of the ship.

**danger area.** That part of a mine’s firing area that is inside the damage area of a mine countermeasures ship with respect to the same given mine.

**dangerous front.** In mine warfare, the athwartship distance in which there is a likelihood that a mine countermeasures (MCM) platform could be damaged by a mine that the MCM platform has actuated.

**data link reference point (DLRP).** A fixed geographic reference point specified by appropriate authority from which a participating unit/reporting unit can calculate the relative position of own-unit and local tracks. The DLRP is the X-Y grid origin of the tactical digital information link (TADIL) interface.

**datum.** 1. (ASW) The last known position of a submarine or suspected submarine after contact has been lost. An ASW datum is fixed and not corrected for set and drift. 2. (SAR) The probable location of the search object corrected for drift at any particular moment during the mission.

**datum area.** An area in which the search object is initially assumed to be located with equal probability throughout the area.

**datum line.** The line connecting two or more datum points computed for the same specified time, along which the search object is assumed to be located with equal probability.

**dead reckoning (DR).** Determination of position by advancing a previous position for course and distances.

**decision support system (DSS).** An automated data process and communications system designed to furnish top management and/or command and control personnel with “what if” information needed to make tactical and strategic planning decisions. The DSS user states an “exploratory” or “model execution” information request in terms of DSS-designated problem statement language. The DSS program interprets the information request and uses data held in the knowledge base in order to generate a response to the DSS user.

**deconfliction.** In regard to Tomahawk missile operations, measures and procedures established to prevent or resolve interference between friendly forces. 1. airspace deconfliction: Measures and procedures established to prevent or resolve aerial interference between different activities in a common operating area. Airspace deconfliction for TLAM often involves restrictions upon TACAIR altitudes, flight paths, and times at which they may be used in the vicinity of TLAM. Prior measures are the responsibility of the Tomahawk strike coordinator (TSC); the launch area coordinator is responsible for deconfliction in the launch area during the launch window. 2. launch area deconfliction: Measures and procedures established to prevent or resolve interference between Tomahawk firing units and other activity in a common area in which TLAM is launched. Launch area

deconfliction includes aerial, surface, and submarine operations in the vicinity of the firing units. 3. missile deconfliction: Measures and procedures established to prevent interference and fratricide among Tomahawk missiles between their launch positions and their intended aim points. Missile deconfliction includes deterministic offsets generated by the missile operational flight software, firing unit measures during engagement planning and launch, and strike planning measures taken by the TSC.

**decontaminant.** Any substance used to break down, neutralize, or remove a chemical, biological, or radioactive material posing a threat to equipment or personnel.

**deep layer.** In underwater acoustics, the layer of water between the lower edge of the main thermocline and the ocean bottom. It is characterized by a nearly constant temperature and a positive sound-speed gradient caused by pressure.

**deep moored mines.** Moored mines with strong, small gauge cables that permit employment at great depth.

**deep scattering layer (DSL).** In underwater acoustics, a layer or layers in the ocean believed to consist of plankton and fish from which sound rays are scattered or reflected back to the sound source.

**deep sound channel (DSC).** In underwater acoustics, the main sound channel of the ocean, caused by the negative sound-speed gradient of the thermocline and the positive gradient of the deep layer. The axis of the channel is typically located between 2,000 and 4,000 feet.

**defensive mine countermeasures.** Countermeasures intended to reduce the effect of enemy minelaying.

**deflagration.** The physical and chemical change of an explosive that, following initiation, proceeds at a velocity less than that of sound through the deflagration material.

**deflection.** The angle between the line of sight and the vertical plane through the line of fire, measured in the slant plane through the line of sight and the elevation axis.

**degaussing range.** An array of underwater sensing devices, either permanently installed on the bottom of a harbor channel or on a mobile unit capable of being established in forward areas by ship or boat, used to measure the magnetic field of ships or boats to determine the effectiveness of their degaussing system.

**delay arm.** A feature on a mine causing it to remain unarmed for a selected period of time after placement.

**delay rising mechanism.** A feature or device on a moored mine causing the case to remain attached to the anchor for a selected period of time or prescribed interval after placement.

**delay time.** In mine warfare, the time between the application of the minimum pulse field and the registration of the look under consideration.

**delayed fallout.** Radioactive fallout that returns to earth later than 24 hours after a nuclear detonation; it usually ascends into the stratosphere and is distributed worldwide.

**deliberate attack.** In ASW, an attack delivered with maximum accuracy when the tactical situation allows time to obtain accurate attack data. Also see urgent attack and DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddic/index.html>

**delousing.** Searching in the vicinity of the task force main body to detect any potential hostile submarines.

**demodulation.** The extraction of low frequencies from their carrier frequency.

**demolition.** The destruction of structures, facilities, or materiel by use of fire, water, explosives, mechanical, or other means.

- density.** The density of seawater is the mass per unit volume. It increases with increasing salinity and pressure and decreases with increasing temperature.
- deperming.** The use of high currents in coils temporarily arranged around a ship to reduce its magnetic signature.
- deployed period.** A ship is considered deployed when it is operating out of home port for more than eight weeks or when specified as deployed by the fleet commander.
- deployment cycle.** The deployment cycle is that period of time from the commencement of one deployment to commencement of the next deployment.
- depression/elevation (D/E).** The feature of a sonar set that enables its beam to be trained in the vertical direction.
- depressor.** A hydrodynamic planning device used to obtain and maintain proper depth of sweep wire in a mechanical sweep.
- depth excess (DE).** In underwater acoustics, 1. The difference between the bottom depth and the depth at which the sound velocity is equal to either the surface velocity when there is no layer depth, or the maximum velocity in the surface layer. 2. The difference between the depth at which the maximum near-surface sound velocity recurs and the bottom depth. It is applied to convergence zone propagation.
- depth required.** In underwater acoustics, the minimum depth required for a reliable convergence zone to exist. It is 200 to 300 fathoms below the critical depth.
- depth separation.** The vertical distance that must be maintained above and below the submarine between: a) the highest fixed part of the submarine structure and the lowest point of a ship or towed device, b) the submarine's keel and the bottom, c) the vertical distances (buffer) between two defined depth zones, or d) the vertical distance between the highest fixed part of a submarine's structure and the lowest fixed part of a submarine operating above.
- destroy.** A tactical task to physically render an enemy force combat-ineffective unless it is reconstituted. To render a target so damaged that it cannot function as intended nor be restored to a usable condition without being entirely rebuilt. Also see "destroyed" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>
- destructor.** 1. An explosive or other device for intentionally destroying classified equipment, a missile or aircraft, or a component thereof, either for safety considerations or to prevent compromise. 2. Bomb converted to a bottom mine by addition of a kit (mine warfare).
- detained vessel.** In maritime interception operations, a suspect vessel that has been queried or boarded and is believed to be carrying contraband. The suspect vessel remains in this status until changed by higher authority.
- detection circle.** A circle described around a screened force and within which a submarine may be expected to make contact.
- detection probability.** In naval mine warfare, the ratio of the number of mines detected on a single run to the number of detectable mines within the characteristic detection width. Also see "characteristic detection probability" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>
- detection range.** The range at which detection occurs. Detection range can be estimated or calculated or may be the actual detection range.



**detection threshold.** In underwater acoustics, the point in time when a signature component can be distinguished from the background noise.

**detection width.** In naval mine warfare, the width of path over which mines can be detected on a single run at a given probability of detection (Pd). Also see “characteristic detection width” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**detector.** Any mechanism by which the approach or presence of a chemical or biological agent is made known.

**detention.** In maritime counterdrug and alien migrant interdiction, the delaying or holding up of a vessel, aircraft, and/or person(s) for a period of time for the purpose of inspection, investigation, search, or until discrepancies are corrected; this exercise of control is frequently used as a preliminary step for law enforcement actions.

**diagnostic.** Those actions taken to identify and evaluate unexploded explosive ordnance.

**diffraction loss.** The loss of sound energy that occurs when sound rays traveling in a sound channel experience leakage out of the channel and thus out of the main wave front.

**digital scene matching area correlation (DSMAC).** A navigational update system in the conventional TLAM that compares binarized ground reference information loaded into the missile prior to launch with optically observed ground images to provide accurate, precise fixes.

**direct fire.** A form of NGS fire used against targets that are visible from the ship and that may be tracked using the ship’s fire control system. Also see indirect fire. See direct fire in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**direct path (DP).** In underwater acoustics, a propagation path composed only of those sound rays that travel from source to receiver without any intervening reflections (that is, surface or bottom) and do not enter a ducted mode.

**direct support.** In naval operations, the support provided by a unit or formation not attached or under the tactical command of the supported unit or formation but required to give priority to the support operations required by that unit or formation. A direct support unit operates under the tactical control of a supported force commander. Operational control and tactical command remain with the assigning authority. Also see associated support and integrated operations.

**direct support sorties.** Component direct support sorties are those that are planned and executed by a component commander in direct support of his/her own mission in accordance with joint force commander guidance, or those sorties needed by the component commander for the immediate defense of his forces.

**directivity index (DI).** A measure of the amount by which an array, through its beam pattern, discriminates against noise in favor of a signal.

**disposition.** An ordered arrangement of the stations of two or more formations proceeding together for any purpose, such as cruising, air defense, or replenishment. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**disposition axis.** A reference line for stationing two or more formations in relation to each other.

**distance.** The spatial separation of two points, measured by the length of a line joining them. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**distance line.** A lightweight line that has sound-powered telephone lines for two circuits interwoven and that is

marked to indicate the distance between ships during underway replenishment. The zero end is secured to the delivering ship's rail, and the outboard end is tended by the receiving ship.

**distress phase.** See "search and rescue incident classification" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**divergence.** A name given to energy loss as a function of distance.

**diverted vessel.** In maritime interception operations, a suspect vessel that has been queried or boarded, found to be in violation, and diverted to a neutral port requested by the detainee or diverted to a port selected by the cognizant commander.

**divided fire.** Directing the fire of one ship's batteries against two targets.

**Doppler.** A shift in the frequency by the relative motion between a sensor and a source. If a sound source is moving toward a sensor, the sensor will receive more cycles during a given time interval than the source is producing. If a sound source is moving away, the converse will occur.

**dose rate.** A measure of the amount of ionizing radiation an individual is exposed to, per unit of time, commonly expressed in units of gray (or rads) per hour.

**downlink.** In submarine usage, one-way communications to a submarine.

**downrange travel.** The horizontal distance the weapon travels from release to impact.

**downslope enhancement.** Acoustic energy from a source in shallow water changes from a bottom bounce path to a convergence zone or sound channel path as it travels to deeper water and is concentrated down the slope to a receiver in deep water. Also called the megaphone effect. See upslope enhancement.

**drift.** The vectorial movement (direction and distance) of the search object caused by momentum, drag, wind, water, or other external forces. See DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**drifting mine.** A buoyant or neutrally buoyant mine, free to move under the influence of wind, waves, current, or tide.

**ducting.** A mode of propagation of electromagnetic energy, usually in the lower layers of Earth's atmosphere, where the waves are bent by atmospheric refraction. This creates a duct or waveguide effect where the waves are trapped and partially follow the Earth's curvature, causing part of the radiated and target-reflection energy of a radar system to be guided over distances far greater than the normal radar range.

**dummy load.** Resistive termination or other device that closely simulates the characteristics of a radio frequency transmitter system antenna but does not radiate an appreciable amount of radio frequency energy.

**duplex.** Circuit that provides two channels or frequencies linking two different stations, allowing the simultaneous exchange of information.

**duplicate track numbers.** The same track number used by two or more investigating units for two or more different tracks.

**duty.** An identified block of related functions within a larger command structure that can be assigned to a single subordinate. Assignment automatically delegates the requisite authority for command and control required to fulfill the tasking. With the delegation of authority comes the inherent responsibility of the subordinate to the assigning superior for execution of the task in accordance with known orders and procedures.

**dwelt time.** The period of time that a target will remain stationary or that an activity will continue until completed. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddiet/index.html>

**early fallout.** Radioactive fallout that returns to Earth within 24 hours after a nuclear detonation. Also referred to as local fallout.

**echo.** In active sonar, the sound waves generated by the projector to the target and reflected from the target back to the hydrophone or source.

**echo level.** In active sonar, the level or strength of returning echo over a given range expressed in dB/ $\mu$ Pa.

**echo ranging.** The process of determining range to an underwater object by measuring the interval of time necessary for a transmitted pulse of sonic or supersonic energy to be reflected by that object.

**echo sounding equipment.** 1. Sonar equipment used to measure the depth of water beneath the keel of a ship by obtaining echoes from the bottom. 2. Fathometer.

**economic shipping.** Shipping employed by nations to carry cargoes in support of their civil shipping operating commercially not in support of the military. In crisis regions, this category also may include privately chartered relief shipping not under direct military control.

**eddy.** 1. Circular water movement usually formed where currents pass by an obstruction between two oppositely flowing currents or along the edge of a permanent current. 2. Large water masses, either cold or warm, that break off from their parent water mass into a different water mass yet retain their specific properties for long periods (months) before being assimilated.

**effective range.** The maximum distance at which a weapon may be expected to inflict casualties or damage.

**effective visibility.** In SAR, the approximate distance that an automobile may be recognized from an aircraft at a particular search altitude. Used to determine search sweep widths over land.

**Ekeland range.** A method that provides an estimate of target range based on own-ship's motion and target bearing rates derived from the time/bearing plot.

**electrical depth.** In mine warfare, an environmental parameter associated with electrode sweeps used when electrical depth is greater than actual depth. This occurs when the upper layer of the seabed becomes saturated with seawater such that the conductivity of this layer approximates the conductivity of the seawater.

**electronic countermeasures (ECM).** Actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum; includes electronic jamming and electronic deception, specifically manipulative deception, simulative deception, and imitative deception.

**electronic intercept.** Actions taken to search for and identify electronic emissions.

**electronic security.** The protection resulting from all measures designed to deny unauthorized persons information of value that might be derived from their interception and study of noncommunications electromagnetic radiation (e.g., radar).

**emission.** Radio waves radiated into space by a radio transmitter or the process of ejecting electrons from the surface of a material under the influence of heat, radiation, or other sources.

**employment cycle.** For ships, this cycle extends from the completion of one regular overhaul or, upon commissioning in the case of new ships, through the completion of the subsequent overhaul.



**enabling run.** The distance along the torpedo track from the launch point to the point at which the torpedo enables.

**endfire.** In underwater acoustics, a reference to a signal detected at one of the extreme ends of a sonobuoy plant or fixed array.

**enemy course of action (ECOA).** Broad and conclusive actions that an enemy force can carry out under conditions favorable to them. Each ECOA represents a major option open to an enemy in the employment of the force as a whole.

**engagement grid.** In information operations, the application of physical means to affect and shape the battlespace. The engagement grid equates to decision superiority based on superior information filtered through the commander's experience, knowledge, training, and judgment; the expertise of supporting staffs and other organizations; and the efficiency of associated processes, thus enabling the commander to employ speed of command and to achieve overwhelming effect at precise places and times.

**engagement planning.** The process and procedures performed by the firing unit to build the overwater portion of a TLAM mission from the launch position to the first preplanned waypoint. Decisions for each plan include the time and direction of launch, launch position, altitude commands, waypoint employment, and quantity of ordnance.

**equipment.** Those items that require management control afloat because of any one or a combination of high unit cost, vulnerability to pilferage, and/or are essential to the ship's mission. Equipment does not encompass installed mechanical, electrical, ordnance, or electronic equipments (less personal computers), components, or systems. Equipment items generally are identifiable to end-use applications aboard ships to the extent that an allowed quantity of the item can be and is determined on an individual ship basis.

**escort jamming.** An electronic attack tactic whereby a jamming platform accompanies the strike vehicles and provides protection by jamming enemy electronic systems.

**escort leader.** Designated by the striking group commander to command all fighter escort aircraft from the striking group. May also be the strike commander, if so designated.

**estimated launch position (ELP).** In Block III weapons control systems, the ELP is the projected position of own-ship at the launch time calculated for a time-on-top engagement plan, based on current course and speed.

**evasion.** As used in ASW operations, a change in the planned route or speed (but not the destination) of a force or independent ship, usually ordered by the officer in tactical command for tactical reasons.

**evasion time.** The time available to evade ordnance after the last useful target data is received by the attacker or the launching of ordnance, whichever occurs first. During this interval, the target may maneuver, while the attacking ship is limited in effecting counteraction.

**evasive steering.** Alterations of course to complicate an attacker's fire control problems by zigzagging, sinuating, and weaving.

**examination anchorage.** An anchorage assigned for the purpose of detaining ships for examination. The anchorage is established outside the harbor defenses, and suspect ships are anchored there while their suspect status is investigated and resolved. It is a precaution necessary to prevent the covert introduction of hostile cargo or special weapons.

**excess hazardous material.** Unused hazardous material in full, properly sealed containers that can be returned to the supply system for reissue.

**exchange rate.** In mine warfare, the number of mines laid per casualty.

**exfiltrate.** The movement of personnel or units out of or away from areas under enemy control. Also see “exfiltration” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**expanded maritime interception operations (E-MIO).** Broadened maritime interception operations to intercept targeted personnel or material that poses an imminent threat to the United States. E-MIO may involve multinational forces and may be implemented without sanctions.

**expected casualties.** In naval mine warfare, the average number of ship casualties in N transits of a minefield.

**expeditionary airfield.** A prefabricated and fully portable airfield. The effort and assets required for the installation/operation of an expeditionary airfield can require the participation/support of all elements of the Marine air-ground task force.

**expendable bathythermograph (XBT).** A bathythermograph launched from a ship (SXBT), submarine (SSXBT), or aircraft (AXBT) that records water temperature versus depth down to 2,500 feet.

**expendable ordnance.** See conventional ammunition.

**exploratory-reconnaissance objective.** In naval mine warfare, determining whether mines are present or not and, if so, establishing the limits of the mined area. This is usually the first objective when it is believed that a minefield has been encountered.

**explosive ordnance reconnaissance program.** Reconnaissance involving the investigation, detection, location, marking, initial identification, and reporting of suspected unexploded explosive ordnance by explosive ordnance reconnaissance agents in order to determine further action.

**extended maneuvering interval.** The standard maneuvering interval plus 500 yards, unless otherwise ordered, to allow for station-keeping errors.

**extraction.** The removal of personnel or units from areas under enemy control by some type of platform.

**false alarm density.** The number of false targets per square nautical mile.

**false target.** An echo or noise source other than the real target, which can cause false detections and false homing.

**false target generator.** Jammer that radiates apparent target return signals that can be received and processed either completely or in part by a victim radar but which are actually false, confusing, or nonexistent in range, angle, and/or velocity.

**fastrope.** A means of inserting forces from a helicopter by sliding down a line lowered from the helicopter using only handgrip tension to control the rate of descent.

**field-of-view.** In photography, the area in the object space that the camera will record when the picture is taken. Also see “field of view” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**figure of demerit (FOD).** 1. The maximum decrease in own-ship’s radiated noise that can be sustained and still be detected by a submarine 50 percent of the time. 2. An estimated figure of merit used by opponent against own-platform.

**figure of merit (FOM).** A measure of the effectiveness of a sonar set for a particular situation. It is the maximum allowable propagation loss that a signal can suffer for a system to meet a desired performance criterion, usually a 50 percent probability of detection.

**filter.** A device for separating frequency components of a signal. This is accomplished by allowing components in one or more frequency bands to pass through the filter relatively unattenuated, while attenuating components in other frequency bands. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**final diameter.** The diameter of the circle that will ultimately be described by a ship with a constant rudder angle when a turn of 360° has been completed.

**fire support officer (FSO).** A full-time coordinator of all fire support and the field artillery commander's representative at the supported headquarters.

**firebreaks.** Administrative and physical steps taken to reduce the risk of an inadvertent weapons firing.

**first preplanned waypoint (FPPWP).** The starting point of the cruise missile support activity-planned portion of a TLAM mission to which the firing unit's engagement plan delivers the missile. The FPPWP has a specified latitude, longitude, altitude, and departure heading.

**flag state.** The nation where a given vessel is legitimately registered.

**flash-bang.** A normally nonlethal explosive munition used to create diversion, confusion, and/or fear. It is employed during an assault. Also called flash-crash.

**flashing.** See deperming.

**fleet issue load list (FILL).** Consolidated listing of material to be carried onboard combat stores ships for the support of operating afloat forces to ensure maximum fleet readiness. It is based on actual past demands of those items most commonly requested by the fleet units.

**fleet mail center.** A DOD facility operated by the U.S. Navy to send, receive, distribute, combine, transfer, and dispatch military mail for transportation to, from, and in overseas areas.

**fleet support ship.** A government-owned ship operated by the Military Sealift Command with a civilian crew augmented by a military department. This type of ship is employed in direct support to the active fleets of the U.S. Navy, providing logistics support in a manner comparable to that provided by Combat Logistics Support Force ships manned and operated by U.S. Navy personnel.

**flex deck.** Aircraft carrier operation where unscheduled, continuous launch and recovery of aircraft is made possible.

**flight.** Any number of aircraft, regardless of type (fixed-wing or helicopter), proceeding in company on a common mission or to the same destination.

**float light.** A day and night seamarker dropped by an aircraft or surface ship to mark a reference point.

**float pendant.** In mine warfare, a specified length of wire that attaches the marker float to the depressor or otter and determines the sweep depth and swept path at the outboard end of mechanical sweep gear.

**floe.** Any relatively flat piece of sea ice 60 feet or more across. Floes are classified according to horizontal extent as follows (size/horizontal extent): giant/over 5 nm; vast/1 to 5 nm; big/500 to 2,000 yards; medium/300 to 1,500 feet; and small/60 to 300 feet.

**flow noise.** The noise produced by water movement past the transducer or hydrophone array housing; noise produced at the hull of a moving ship; noise created by turbulent flow in the turbulent boundary layer around the hydrophone.

**focus of effort.** The most important task to be accomplished by the force. It is the critical vulnerability chosen to exploit, the paramount objective desired to accomplish. All actions should be oriented on that task.

**force majeure.** 1. An external, irresistible force or condition (natural or man-made such as a storm, fire, or disablement) of such severity that it threatens destruction of the vessel or loss of life unless immediate response action is taken. 2. An event that cannot be anticipated or predicted that results in actions contrary to some law.

**force module (FM).** In maritime prepositioning force operations, a task organization that is tailored and time-phased to meet specific challenges of operational environments ranging from permissive (i.e., foreign humanitarian assistance) to hostile (i.e., major theater war in any area of responsibility). Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**force over-the-horizon track coordinator (FOTC).** The command designated to develop, maintain, and broadcast a common tactical surface picture to all participating ships in a battle group (BG). The FOTC fuses nonorganic data with the data gathered by organic sensors in the BG.

**force self-defense areas.** In maritime operations, areas existing within and as subsets of a maritime area of operations. Size and geometric configuration of these areas/zones may differ from warfare mission area to warfare mission area. See surveillance area; classification, identification, and engagement area; and vital area.

**force sustainment.** Capabilities, equipment, and operations that ensure continuity, freedom of action, logistic support, and command and control.

**forcible entry.** Seizing and holding a military lodgment in the face of armed opposition.

**foreign object debris (FOD).** Any material found in the vicinity of flight operations that could contribute to the accidental damaging of an aircraft, generally as a result of an aircraft ingesting such material into an engine and damaging its internal workings. Also see “foreign object damage” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**formation.** An ordered arrangement of two or more ships, units, or aircraft proceeding together under a commander.

**formation axis.** A reference line about which the stations, except screening stations, of a circular formation of ships are arranged. In a formation consisting of both a main body and a screen, the formation axis is the axis of the main body but is not the axis of the screen.

**formation center.** A position designated as the center of an ordered arrangement of ships, normally the geometric center. It is the point of origin of a formation axis.

**formation guide.** The ship in each formation of a disposition on which the units in that formation take and keep station.

**forward logistic site (FLS).** The forward-most land-based transshipment point that provides the bridge between an advanced logistic support site and units at sea. Also see “naval forward logistic site” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**forward presence.** Maintaining forward deployed or stationed forces overseas to demonstrate national resolve, strengthen alliances, dissuade potential adversaries, and enhance the ability to respond quickly to contingencies.

**frag.** To lay on or assign as a mission or target. Derived from the term “fragmentary order” as defined in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**free weapon.** A weapon available for use that is not currently engaging a target and is capable of engaging at least one target.

**free-in-air-dose.** Radiation that would be measured in air at a certain point. Military tactical dosimeters measure free-in-air-doses.

**frequency agility.** Ability of an electronic transmitting system to quickly change operating frequency.

**front.** In oceanography, the interface or transition zone between two water masses of different characteristics. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**full-dimension protection.** The ability of the joint force to protect its personnel and other assets required to decisively execute assigned tasks.

**function.** A defined activity that may be delegated to subordinates through specific assignment or as part of a duty within the force command structure.

**fundamental frequency.** In underwater acoustics, the fundamental frequency of a group of frequencies is the highest frequency that could produce the whole group as harmonics and is, therefore, the greatest common divisor of the frequencies in the group.

**furthest-on-circle.** In ASW operations, an expanding circle centered on a datum or search center, of which the radius at any one time is a command estimate of maximum submarine travel from datum plus datum error.

**fuzing range.** The maximum distance from a target at which a proximity fuze can be expected to function.

**gambit.** A deception tactic that aims to induce a submarine to take some action that may render it liable to detection.

**gap.** In naval mine warfare, an area within a minefield, obstacle belt, or enemy defensive scheme that is relatively free of mines, obstacles, fires, or other substantial resistance (which may include a break in enemy tactical dispositions or formations), thus allowing an attacking force to penetrate with greater speed and power. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**gear-reduction ratio.** The ratio of the speed of the input shaft of a gear train to the output shaft. With regard to a marine propulsion plant, it is usually a reference to the ratio between the speed of the prime mover and the speed of the propeller shaft.

**general agency agreement (GAA).** Pertains to government-owned ships operated under cost plus fixed-fee contracts by commercial ocean carriers acting as general agents for the Maritime Administration, U.S. Department of Commerce, and with whom Military Sealift Command has entered into agreements for the exclusive use of such ships.

**general support fire.** Those artillery and naval gun fires delivered for the support of the landing as a whole by ships or artillery units not providing direct support.

**generated target bearing (relative or true).** The relative or true bearing of a target as determined by a computing instrument from previous positions of own-ship and target and an established rate of change of bearing.

**geodetically controlled imagery.** For imagery, the photogrammetric adjustment of one or more images relative to each other and to an absolute (fixed) ground reference system. Also called geopositioned imagery.

**geodetic coordinates.** The quantities of latitude, longitude, and height that define the position of a point on the surface of the Earth with respect to the ellipsoid surface.



**geodetic datum.** Defines the position of a coordinate system in relation to the Earth. This definition includes the determination of the origin, the scale and the orientation of the axes, and typically includes an ellipsoid definition.

**geodetic height.** The height above the reference ellipsoid, measured along the ellipsoidal outer normal to the point in question. Also called ellipsoid height.

**geoid.** An equipotential surface of the Earth's gravity field that most nearly coincides with mean sea level. The direction of gravity is everywhere perpendicular to the geoid. Oceanographic effects cause minor deviations between mean sea level and the geoid of generally less than one mile.

**geophone.** In mine warfare, a sensor used in seismic mines.

**geopositioned imagery.** For aerial reconnaissance imagery, the photogrammetric adjustment of one or more images relative to each other and to an absolute (fixed) ground reference system. Also called geodetically controlled imagery.

**geospatial information.** Maps, charts, other publications, and digital information associated with a specific geographic location or region defined by geographic or grid coordinates. Also see "geospatial information and services" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**global ordnance positioning.** The fleet process of determining optimum locations worldwide for ammunition stocks. It considers combat and noncombat expenditure requirements, force deployments, throughput and political factors, training locations, and other related factors.

**gradient.** The rate of change of one quantity with respect to another, especially the rate of change of temperature with depth. A positive gradient is a temperature increase with increasing depth; a negative gradient is a temperature decrease with increasing depth. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**graywater.** Wastewater from deck drains, lavatories, showers, dishwashers, laundries, garbage grinders, and shipboard medical facilities that does not include industrial waste, infectious waste, or human body waste.

**grazing angle.** In underwater acoustics, the angle that a sound ray makes with an ocean boundary, measured in degrees to the horizontal or boundary surface.

**grid.** A two-dimensional (plane) Cartesian coordinate system created by a map projection. Used to simplify reading coordinates from a map. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**gridlock.** A procedure for determining data registration corrective values (pads) by comparing remote tracks received from a designated gridlock reference unit to local data.

**gross explosive weight.** One of the two systems of weight measurement that is significant in planning for ammunition storage. The gross explosive weight is the total weight of the packaged round measured in short tons (or pounds, when quantities are fractional tons).

**ground effect.** 1. A condition created when a helicopter's rotor downwash is altered in its flow by contact with the ground. This occurs while hovering or in very slow flight within one rotor diameter of the ground. The result of ground effect is that the helicopter requires less power to hover than when hovering out of ground effect. 2. The generation of an air cushion artificially created so that a vehicle is supported on the air cushion close to the ground but nevertheless riding free; hence, utilizing this effect to eliminate ground friction. Also called ground cushion.

**ground gain.** In air reconnaissance, the distance (usually in feet) that the aircraft travels during the time interval between two consecutive exposures (or frames).

**ground resolution.** In air reconnaissance, the smallest area or object on the ground that is detectable in the negative. Factors affecting ground resolution include focal length, altitude, film type, target contrast, atmospheric conditions, and individual camera characteristics.

**ground resonance.** A condition of geometric imbalance in helicopters caused by offset dynamic forces when the helicopter makes improper contact with the deck. If allowed to continue, destruction of the helicopter is imminent. Improper tiedowns aggravate the onset of ground resonance.

**ground riverine close fire support.** Supporting fires by organic or attached units of the ground component of the mobile riverine force, including boat-transported and/or barge-mounted artillery.

**guerrilla.** An irregular, predominantly indigenous combatant who conducts paramilitary operations in enemy-held territory. Also see “guerrilla,” “guerrilla force,” “guerrilla warfare,” and “unconventional warfare” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**guide.** A designated ship on which other evolution units take and maintain their stations. The term is modified by the words disposition, formation, station unit (or other unit as appropriate) to specify a particular guide. Also see line guide.

**guillotine.** A portable, explosive, cable-cutting device used to sever the airborne mine countermeasures tow wire in an emergency.

**gun laying.** The process of positioning guns in train and elevation in a predetermined relationship with respect to the line of sight. The line of sight may be estimated at an aloft director, generated in the plotting room, or established at the gun.

**gun wear.** Normal gun bore erosion, calculated in terms of equivalent services rounds. Gun wear reduces initial velocity, terminal accuracy, and maximum range.

**gunfiring rates.** 1. deliberate: fire delivered at a rate intentionally less than normal to permit adjustment corrections, to meet specific tactical requirements, or to conserve ammunition. 2. rapid: no check fire is used for the purpose of applying corrections. It is the maximum rate that can be maintained for a given period. 3. slow: fire deliberately delayed to allow for the application of corrections or to conserve ammunition.

**gyro angle.** In underwater warfare, the angle, measured left or right, between the torpedo tube longitudinal axis and the desired torpedo course as computed by the fire control system.

**gyro angle order.** The angular quantity transmitted to the torpedo that determines its initial postlaunch turn to preenable course, measured relative to the ship's head.

**half channel.** In underwater acoustics, an upward-refracting condition where the sound-speed gradient is positive from the surface all the way to the bottom. In a half channel, sound waves behave as if in a very thick surface duct.

**hang fire.** Failure of the propelling charge to burn properly, causing delayed firing. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**harassing (air).** The attack of any target within the area of land battle not connected with interdiction or close air support. It is designed to reduce the enemy's combat effectiveness. Also see “harassment” and “harassing fire” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**harassment mines.** Mines set to function against sweepers or to project the psychological threat of a minefield.

**harbor approach defense (HAD).** The employment of forces to ensure the unimpeded use of an inshore coastal area, including a defensive sea area, by friendly forces and, as appropriate, to deny the use of the area to enemy forces.

**harbor defense area.** Tactical subdivisions established to provide early detection, location, and identification of enemy surface or underwater craft approaching within striking distance of ships at anchorage or harbor installation.

**harbor defense commander (HDC).** An officer designated by the Joint Task Force Commander or Naval Coastal Warfare Commander to conduct inshore surveillance, interdiction, vessel movement control, and water-side security operations in a port, harbor, anchorage, or designated defensive sea area.

**harbor screen (sortie or entry).** A screen about a harbor entrance to give antisubmarine protection to ships entering or leaving the harbor.

**harmonic.** In underwater acoustics, a harmonic is a frequency that is an integer multiple of the fundamental frequency. The second and third harmonics of a 10-Hz fundamental, for example, will occur at 20 Hz and 30 Hz respectively.

**harmonic chart.** An aid used in determining harmonic relationships. It lists at least the first 10 harmonics for every fundamental frequency from 1.0 Hz to 51.8 Hz (at 0.1-Hz intervals).

**haven.** 1. Safe area located in the forward operating area where ships can be staged for provisioning or repair, or to await tasking. 2. A depth band in which a submarine will be safe from torpedo attack due to the stratum inhibits placed on the torpedo by floor and/or ceiling presets. Also see “havens (moving)” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**hazardous material (HAZMAT).** Any material that because of its quantity, concentration, or physical or chemical characteristics may pose a substantial hazard to human health or to the environment when released including, but not limited to: aerosol containers, flammable materials, toxic materials, corrosive materials, oxidizing materials, and compressed gasses.

**hazardous substance.** Either a hazardous material or a hazardous waste.

**hazardous waste (HW).** 1. A solid waste or combination of solid wastes that because of its quantity, concentration, or physical, chemical, or infectious characteristics may: a) cause or significantly contribute to an increase in mortality or an increase in irreversible or incapacitating reversible illness, or b) pose a substantial present or potential hazard to human health or to the environment when improperly treated, stored, transported, disposed of, or otherwise managed. The term solid waste includes liquid, semi-solid, or contained gaseous material. 2. Any waste that requires special precaution in its storage, collection, transportation, treatment, or disposal to prevent damage to persons or property, including explosive, flammable, volatile, radioactive, toxic, and pathological wastes.

**heat strain.** The body’s reaction to heat stress. The reaction may be local, such as a burn, or generalized, such as an increase in core (inner) body temperature.

**heat stress.** Subjecting the body to higher than normal temperatures. Heat stress may be caused by a high temperature environment or by wearing clothing, such as a firefighter’s ensemble, that impedes the body’s normal cooling.

**height above bottom (HAB).** In mine warfare, the distance from the seabed to the moored mine case or minelike object.



**helicopter action group (HAG).** A unit comprised of two or more helicopters that are assigned to counter a particular surface threat.

**helicopter control ship (HCS).** A commander or ship delegated by the officer in tactical command to take tactical control of all helicopters. It will normally be the screen commander, except in the case of windline screening.

**helicopter element coordinator (HEC).** The officer delegated some or all of the officer in tactical command's detailed responsibilities for management and coordination of rotary wing air assets.

**helicopter wave.** One or more helicopters grouped under a single leader and scheduled to land in the same landing zone at approximately the same time. A helicopter wave comprises one or more flights and can consist of helicopters from more than one ship. Also see "wave" in DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**Helmholtz resonance.** In underwater acoustics, tones produced by water flow past an opening in a ship superstructure.

**high seas.** All parts of the sea that are not included in the exclusive economic zone, the territorial sea, the internal waters of a state, or the archipelagic waters of an archipelagic state.

**highline method of transfer.** A means of transferring light and medium cargo underway in which a highline (wire or synthetic line) between the delivering and receiving ships supports a trolley with cargo hook attached.

**holddown.** An operation designed to keep a submarine submerged, limiting it to its submerged capabilities for gaining intelligence, communicating, and gaining attack position, and thus forcing it to deplete its battery capacity.

**hold-down.** In ASW, an operation designed to keep a diesel-electric submarine submerged, thus limiting it to its submerged capabilities in attacking, gaining intelligence, and communicating, and forcing it to use up battery capacity.

**home on jam (HOJ).** Angular and/or range tracking of a target by a missile or other weapon seeker that utilizes the jamming signal radiated by the target.

**host nation support operations.** Operations conducted to support the security, stability, and well-being of other governments and populations. These operations include long-term programs included in nation assistance, short-term efforts included in humanitarian assistance, and disaster relief and support to insurgency.

**host/tenant agreement.** An agreement between two commands outlining the services that the installation will provide to the tenant and the tenant's responsibilities.

**hostile country vessel.** A vessel that, because of country of registry, ownership, charter, or crew makeup, is controlled in or prohibited entry to the harbor defense commander's area of operations.

**hot pursuit.** A situation where a vessel is being chased or pursued after having violated a coastal state's laws, and the chase extends beyond the normal jurisdictional bounds of the pursuing vessel(s). Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**hot run.** A torpedo that starts its propulsion motor or engine without being released from the submarine.

**hot zone.** Area immediately surrounding a dangerous goods incident, which extends far enough to prevent adverse effects from released dangerous goods to personnel outside the zone. The zone also is referred to as exclusion zone, red zone, or restricted zone in other documents.

**hover.** A condition of flight in which all relative or actual movement has ceased. Also see “hovering” and “hovering ceiling” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**hull-to-emitter correlation (HULTEC).** Association of a radar pulse repetition frequency/pulse repetition interval to a specific platform because of the uniqueness and stability of the emitter and the accuracy of the measurement system.

**hung ordnance.** Airborne weapons that cannot be fired or dropped because of weapon, rack, or circuit malfunction. Also see “hung weapons” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**hydrodynamic noise.** See flow noise.

**hydrophone.** In acoustic mine and underwater warfare, the detecting element in sound equipment that converts the sound vibratory pressure to an electrical signal.

**hydrophone sensitivity (HS).** A decibel function that relates hydrophone voltage output to the sound pressure level sensed in the water, expressed in units of dB/1 volt  $\mu$ Pa.

**ice cover.** The ratio in tenths (or eighths) of the sea surface actually covered by ice to the total sea surface, both ice-covered and ice-free, at a specific location or over a defined area. Also called ice concentration.

**ice edge.** The demarcation at any given time between the open sea and sea ice of any kind, whether fast or drifting. The ice edge may be termed compacted or diffuse.

**ice field.** Area of pack ice that consists of floes of any size and is greater than 5 nm across.

**icebound.** A harbor, inlet, etc., is icebound when navigation by ships, except with the assistance of an icebreaker, is prevented by the presence of ice.

**identification.** The determination of the exact nature of an object that has been detected and classified. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**identified risk.** A risk determined by applying severity and probability analysis to an identified threat.

**illumination.** The amount of light striking a surface. The common unit of measurement is the foot-candle (ft-c).

**illuminator.** The part of a fire control system designed to provide illumination for semiactive weapon homing.

**image resolution.** In air reconnaissance, the ability of the entire photographic system, including lens, exposure, and other factors, to render a sharply defined image. Expressed in line pairs per millimeter (lp/mm).

**indicated Mach number (IMN).** Airspeed, compared to the speed of sound, as calculated by onboard instruments and uncorrected for the effects of humidity, temperature, atmospheric pressure, or wind.

**indications and warning.** Phrase used to describe an indication of an enemy course of action and/or early warning of impending hostile action. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**indicators.** 1. Positive or negative evidence of threat activity. 2. Any characteristic of the area of operations that points toward threat vulnerabilities or the adoption or rejection by the threat of a particular capability. 3. Activities or information that may influence the commander’s selection of a course of action.

**INDIGO.** A message in U.S. message text format used to order the execution of conventional, land-attack cruise missile launches.

**indirect fire.** A form of NGS fire used against targets that cannot be seen from the ship. Also see direct fire. See indirect fire in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**industry-owned, bareboat-chartered ships.** Those ships that the owner delivers to Military Sealift Command (MSC) for an extended period of time (usually 20 years), vesting in MSC for that period of time most of the incidents of ownership (e.g., manning, operation, and control). These ships are designated U.S. Navy ships and use the prefix “USNS” with the ship name and the letter “T” as a prefix to the ship classification (e.g., T-AKR). These ships may be either MSC operated (civil service) or contractor operated.

**industry-owned, time-chartered ships.** These are commercially owned ships, chartered to Military Sealift Command (MSC) for a period of time. MSC has control of the ship and directs the movement (unless operational control has been transferred).

**in-extremis hostage recovery.** Direct action mission to locate, recover, and restore to friendly control persons held captive, isolated, or threatened in a situation of such exceptional urgency that immediate action must be taken to minimize imminent loss of life or catastrophic degradation of the political or military situation.

**influence field.** In mine warfare, the distribution in space of the influence of a ship or minesweeping equipment. It may be referred to as zone about a ship or sweep disturbed or altered by the presence of the ship or gear relative to magnetic, acoustic, pressure, or other disturbances that may actuate a mine firing mechanism without physical contact between ship and mine or its attachment.

**information attack.** That division of information warfare involving the manipulation or destruction of an adversary’s information or information system combat capability without necessarily changing visibly the physical entity within which it resides; it is considered a form of fires.

**information management (IM).** The provision of quality information to the right person at the right time in a usable form to facilitate understanding and decision-making.

**information warfare commander (IWC).** Under the composite warfare commander concept, the officer delegated some or all of the officer in tactical command’s detailed responsibilities for information warfare and granted the tactical control authority to accomplish the assigned missions and tasks.

**infrared intelligence (IRINT).** Intelligence derived from information collected by infrared sensors.

**infrared signature.** The infrared signature is determined by the sum of all heat sources (mechanical, electrical, and solar), such as engine exhaust, gear boxes, reflection from windows and wind screens, reflective paint, and lights.

**infrasonic sound.** Sound below the range of human hearing (below approximately 20 Hz).

**inherently dangerous.** An activity or task containing a danger to life or limb that is a permanent and inseparable element of the activity. This term and its definition are applicable only in the context of this publication and should not be referenced outside this publication.

**initial point.** In mine warfare operations, a preselected point on the surface of the Earth that is used as a reference. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**initial salvo error.** A term used in conventional gunnery to indicate the distance and direction from target to the mean point of impact of the initial salvo.

**initial threat.** In mine warfare, the probability that the first ship to attempt to transit a minefield will be damaged to a specified level.

**insertion.** Placement of observation posts, patrols, or raiding parties by helicopter, parachute, watercraft, or other means. Stealth is normally desired in the execution of an insertion.

**inshore area.** The water area adjacent to a land mass in which the proximity and contour of the bottom or the nearby coastline influences and limits the effectiveness of deep-water assets and systems. This area normally extends seaward to a fixed distance established by the area commander as necessary to protect assets located in ports, harbors, approaches, amphibious objective areas, choke points, straits, and roadsteads from surface and subsurface threats. Also see “defensive sea area” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doc-trine/jel/doddic/index.html>

**inshore boat unit (IBU).** A deployable, armed, small craft unit (two boats) that provides small craft security support for naval coastal warfare (NCW) operations in the NCW area.

**inshore operations.** Operations in sea areas in which geographic and hydrographic conditions impose restrictions on the movement of shipping and/or submarines.

**inshore undersea warfare (IUW).** Operations conducted with the objective of denying the enemy the effective use of the inshore area.

**inshore waters.** The inner parts of confined waters including navigable estuaries and harbors.

**insonify.** To project sound energy into any part of the sea.

**integrated operations.** Operations under which a designated unit is attached to a specific task force/group under tactical command (TACOM) and tactical control of the officer in tactical command (OTC) of the specified task force/group. Upon receiving TACOM, the OTC assumes the responsibility for all operations and safety of the assigned unit. Operational control remains with the assigning authority.

**integrated search plans.** In ASW operations, search plans used in coordinated ship/helicopter operations. They are primarily designed either to extend the search attack unit (SAU) search line or to augment the SAU in gaining or regaining contact.

**integrated strike.** A simultaneous attack by TLAM and TACAIR in which ordnance impact time can be critical to the successful completion of the strike. Integrated strikes strive for a synergistic effect between TLAM and TACAIR.

**intelligence center.** In air reconnaissance, the ground or ship-based intelligence system where photographic and electronic intelligence is processed, evaluated, and stored or forwarded to using agents or agencies, consistent with the tactical situation.

**intensity (sound).** In underwater acoustics, 1. The amount of sound energy per second crossing a unit area. 2. The square of the sound pressure level divided by the impedance of the water (a measure of sound power per unit area).

**intercept.** 1. To detect and identify enemy aircraft beyond visual range by day methods or by all-weather and night methods. 2. To detect and identify distant electronic signals.

**intercept guard.** The frequency range that a designated unit is assigned to monitor and to report all intercepted enemy or unidentified signals within that frequency range to the controlling ship.

**interference.** Any electromagnetic disturbance that interrupts, obstructs, or otherwise degrades or limits the effective performance of electronics or electrical equipment.

**intermediate support base (ISB).** In riverine and coastal operations, a facility that is capable of providing major maintenance on craft (overhaul is not included). It usually supports one or more small support bases.

**intermediate water depth mine (IWDM).** A weapon system targeted against both high and low speed surface and subsurface targets in the gaps between shallow-bottom and deep-moored mines.

**internal wave.** A wave that occurs in the ocean medium either at a surface of density discontinuity (as in fronts) or at the boundary between the mixed layer and the thermocline.

**intersection.** In photogrammetry, the process in which the light rays through the image points and exposure stations of each geodetically controlled image of a stereopair are crossed to determine the desired ground point coordinate.

**inter-service support agreement (ISSA).** A formal, legal, and binding funding document that specifies actions and responsibilities to be performed by the service provider and the receiver. Also see “inter-Service, intragovernmental agreements,” and “inter-Service support” in DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**intervalometer.** An electrical device used in releasing/firing weapons at a constant predetermined time interval between releases.

**intrusion.** The intentional insertion of electromagnetic energy into transmission paths in any manner with the objective of deceiving the operators or of causing confusion. Also see DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**isohaline.** A line or surface drawn on a map or chart to indicate connecting points of equal salinity.

**isospeed.** In underwater acoustics, values of sound speed are the same in all parts of a given water column; there is no change in sound speed with depth.

**isothermal.** In underwater acoustics, temperature is equal or constant with respect to space or time; there is no increase or decrease in temperature with depth.

**isotropic.** Having the same physical properties in all directions.

**isovelocity.** See isospeed.

**jam-to-signal ratio.** The ratio of the effective jamming signal power in the victim electronic system bandwidth to the desired signal power.

**j-blade propeller.** A propeller designed to reduce cavitation. The name is derived from its resemblance to the letter J.

**jettison.** Discarding a weapon from a delivery vehicle when normal operation is not intended. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**jink.** An unpredictable maneuver (usually changing both direction and altitude) conducted by an aircraft to evade hostile weapon engagement parameters.

**jinking.** Random changes in heading, altitude, and “g” acceleration in order to present a continuously changing flight path.

**jitter.** Small, rapid, perhaps random, fluctuations about an intended or average value.

**joint action area (JTAA).** A waterspace management area in which a single friendly submarine is operating in coordination with air and/or surface forces. Air and surface ASW attacks are prohibited throughout the JTAA unless a NOTACK area or a submarine-generated search area has been established.



**kite.** In naval mine warfare, a towed planing device that causes the inboard lateral end of the sweep to assume a determined depth. Also known as a depressor in mechanical sweeping. See DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**knowledge superiority.** The ability to achieve a real-time, shared understanding of the battlespace at all levels through a network that provides the rapid accumulation of all the information that is needed — and the dissemination of that information to the commander as the knowledge is needed — to make a timely and informed decision inside any potential adversary's sensor and engagement time line.

**knuckle.** Wake turbulence having great persistence caused by a tight turn of a surface ship or submarine. Frequently misinterpreted as the target by the sonar operator.

**ladder.** A succession of salvos fired with known and predetermined changes between successive salvos to ensure early establishment of a hitting gun range and deflection in surface fire, to serve as a yardstick for covering an area target, or to increase pattern size.

**landfall.** In TLAM operations, the point at which the missile crosses the coastline and begins overland flight.

**landing ship areas.** Areas assigned to landing ships prior to or after carrying out such operations as causeway launching, amphibious vehicle launching, or beaching.

**lateral coverage.** In air reconnaissance operations, the ground distance represented by and included in an aerial photograph as measured on a line perpendicular to the line of flight.

**lateral range.** The minimum distance (at closest approach) between target and observer. When the target is at rest, lateral range is the perpendicular distance between the target and the observer's track.

**lateral separation.** The distance between the tracks of adjacent ships in a formation, particularly during multi-ship sweep endeavors, measured at right angles to the sweep track.

**launch area.** In TLAM operations, the area for which a launch area coordinator is responsible and which may include the waterspace used by the assigned firing units and the surrounding airspace. The size of a launch area is determined by the firing dispositions of launch and support units, the organic sensors and C2 capabilities, required maneuvering room, other friendly operations, threats to the strike force, and neutral activity.

**launch area coordinator (LAC).** The Tomahawk strike coordinator's (TSC) principal deputy, responsible for leading the TLAM launch platforms through execution of the TLAM strike. Coordinates on-scene requirements and makes consolidated reports to the TSC.

**launch basket.** The area from which TLAM may be launched to execute a mission. The launch basket is largely a function of uncommitted fuel onboard the missile and the waypoint turn restraint at the first pre-planned waypoint. The size and orientation of the launch basket vary with each mission, overwater points entered, and may also be affected by the employment of time-on-target capability. For precision strike Tomahawk missions, the launch basket reflects the fuel needed to fly the longest possible route, whether to the target or to a divert area.

**launch window.** A time interval that defines the period in which a surface ship weapons control system intends to launch a TLAM on a particular engagement plan. The launch window is calculated from launch time earliest until some operator-entered launch time latest, which may be as late as 238 minutes after the launch time calculated for the plan.

**law enforcement detachment (LEDET).** A detachment designated to enforce international maritime law.

**law enforcement unit.** A Coast Guard cutter, Navy ship, or boat from either service involved in counterdrug, alien migrant interdiction operations, or other law enforcement activity.

**layer depth.** The depth of the lower edge of the surface layer, that is, the top of the thermocline. Also may be the depth of maximum sound speed near the surface. See DOD Dictionary (JP 1-02). <http://www.dtic.mil/doc-trine/jel/doddic/index.html>

**layer effect.** When sound passes through a layer in which little or no bending of the ray path occurs and then passes into a layer with a strong negative gradient (causing sharp downward bending of the ray), increased spreading occurs with a consequent loss of sound intensity.

**leadthrough operations.** Mine warfare operations intended to assist traffic in the transit of portions of a mined area previously subjected to an MCM effort.

**letter of instruction (LOI).** Used in the higher echelons of military service to convey broad aims and strategic plans or general policy guidance of an operational nature not suited for promulgation in an operation plan or order. It has the same authority as an operation plan or order.

**L-hour.** In amphibious operations, the time at which the first helicopter of the helicopter-borne assault wave touches down in the landing zone. Also see “times” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doc-trine/jel/doddic/index.html>

**light level.** Light level is the ambient light produced by natural sources of sky light combined with any moonlight. Illumination is normally expressed in lux. Light level is categorized as follows: a) low light level: illuminance below 0.0022 lux. b) high light level: illuminance equal to or above 0.0022 lux.

**limited range intercept (LRI).** Communication technique for reducing high frequency communications interception probability.

**limiting depth.** In underwater acoustics, the depth below the deep sound channel axis where the sound speed equals the maximum near-surface sound speed.

**limiting ray.** In underwater acoustics, the sound ray that becomes tangent at the depth where the sound speed is at maximum; it delimits the outer boundary of direct (before reflection) sound rays.

**limpet.** A sea route, other than an approach, coastal, or transit route, that connects two or more routes.

**line abreast.** A line in which ships form directly abeam of the line guide.

**line guide.** When ships are formed in a multiple line formation, the line guide is the ship occupying the station in her own line that corresponds to that of the guide in the guide’s line or, within any line in which no ship occupies the corresponding station, the ship designated by the officer in tactical command.

**line of bearing.** A line in which ships form in a straight line on a line guide in any direction except ahead, astern, or abeam.

**link route.** A sea route, other than an approach, coastal, or transit route, that connects two or more routes.

**lithometeor.** Atmospheric phenomenon that affects the state of the atmosphere. It constitutes dry particles that hang suspended in the atmosphere, such as dust, smoke, sand, and haze.

**littoral.** In military operations, a coastal region consisting of the seaward area from the open ocean to the shore that must be controlled to support operations ashore, and the landward area inland from the shore that can be supported and defended directly from the sea.

**live period.** In multilook mines, the maximum time interval after the first look during which additional looks will be accepted to satisfy all of the subsequent looks and mine logic to cause an actuation.

**live shipment.** Relative to Military Sealift Command, support of amphibious operations, vehicles with gasoline in their tanks (usually three-fourths full) and battery cables connected.

**localization.** The process of reducing the general area of a contact to an approximate geographic area or fixed position.

**logistic support base (LSB).** In riverine and coastal operations, a major support and craft overhaul facility. An LSB normally supports two or more intermediate support bases.

**logistics force.** A naval task organization that performs missions for the logistic support of operations.

**logistics group.** A major naval administration and/or tactical organization, consisting of the commander and the staff, designed to exercise operational control and administrative command of assigned squadrons and units in executing their tasks of providing logistic support of fleet operations.

**look zone.** The area outside the screen in which a submarine may come shallow to use sonar, periscope, or radar to acquire accurate target or screen information before commencing screen penetration.

**loose control.** A form of aircraft mission control in which the aircraft commander selects his own speed, altitude, heading, and the appropriate tactics to accomplish the assigned task. The controlling unit will advise the aircraft of the current tactical picture and will provide further advice if and when available. See also broadcast control and close control.

**loose line abreast.** A formation in which ships stay within 15° of the guide or ship indicated relative to the base course.

**loose line of bearing.** A line of bearing assumed on the basis of either a true or relative line of bearing in which ships stay within 15° of the bearing or its reciprocal.

**loose line of column.** An approximate line of bearing within 15° of column in which distance may be increased to reduce yawing.

**low-probability intercept equipment.** An intercept receiver that employs directional antennas and/or variable frequency and that will not detect a transmission unless frequency, direction, and polarization are in correct coincidence with the victim at the instant of transmission.

**luminance.** The amount of light per unit area reflected from or emitted by a surface. Although this measurement is frequently called brightness, strictly speaking, brightness is influenced by contrast, adaptation, and other factors besides the physical energy in the stimulus.

**magnetic anomaly detection (MAD).** The detection of magnetic materials through the distortions they produce in the normal magnetic field of the earth.

**magnetic self-protection.** The protection of ships and submarines by degaussing to reduce the magnetic signatures and to minimize the possibility of magnetic mine actuation.

**magnetic signature.** The characteristic pattern of magnetic fields produced by a ship as it moves through the Earth's magnetic field.

**magnetic silencing.** The reduction of the magnetic signature of a ship through the use of construction materials as well as techniques, degaussing, and the control of magnetic equipment.

**main body.** The principal units and ships of a formation that are being screened.



**main effort.** The friendly unit or group (controlled by a single designated commander) that constitutes the principle means to accomplish an objective.

**main thermocline.** The layer of water between the surface layer and the deep layer; it is characterized by a negative sound speed gradient. Also known as the permanent thermocline.

**maneuver warfare.** A philosophy that seeks to collapse the enemy's cohesion and effectiveness through a series of rapid, violent, and unexpected actions that create a turbulent and rapidly deteriorating situation, with which the enemy cannot cope.

**maneuvering interval.** When similar ships are formed in a multiple line formation, maneuvering interval is the sum of the standard distances in the longest line, plus one standard distance; with dissimilar ships, it is the sum of the standard distances in the longest line, plus the longest standard distance in any line, including the only ship in a line if the standard distance for that ship is larger than that of any other ship present.

**marginal ice zone (MIZ).** The transition region between the solid ice pack and the open seas in polar regions. The MIZ is a region of high ambient noise across a wide frequency spectrum. It consists of those Arctic and sub-Arctic waters that are ice-covered in winter and open in summer.

**marginal sea-ice zone.** 1. General description for large geographic areas: Those arctic and subarctic waters that are ice covered in winter and open in summer. 2. Operational description for the vicinity of an ice edge: The fringe area from the region of first encounter with sea ice to the region that is continuously covered with sea ice (where the vertical sound speed profile is usually stable).

**marine mammal system (MMS).** The employment of marine mammals by explosive ordnance disposal forces in locating, marking, and recovering underwater objects, and in conducting mine countermeasures and other special operations.

**maritime interception operations (MIO).** Enforcement, through query and visit of merchant shipping (including armed boarding parties), of economic or military sanctions established by a sanctioning body, such as the United Nations, to prevent entry/exit of contraband into/from a designated country or exclusion zone.

**maritime interception operations commander (MIOC).** Under the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for maritime interception operations and granted the tactical control authority to accomplish the assigned missions and tasks.

**maritime prepositioning force (MPF).** A task organization of units under one commander formed for the purpose of introducing a Marine air-ground task force (MAGTF) and its associated equipment and supplies into a secure area. The MPF is composed of a command element, a maritime prepositioning ships squadron, a MAGTF, and a Navy support element.

**maritime prepositioning force independent operation (MPFIO).** A maritime prepositioning force operation that does not augment an existing operation.

**maritime special operations.** Special operations conducted in a maritime environment: on, under, and from the sea, rivers, or other waterways, including those land targets that are best approached from the water.

**marker.** In naval operations, a maritime unit that maintains an immediate offensive or obstructive capability against a specified target. Also see shadower, shadowing.

**masking.** In underwater acoustics, a term used to describe those instances where the signature of a target of interest is obscured by broadband noise or by another discrete frequency.

**master mission library (MML).** In TLAM operations, the compilation of commander-in-chief approved missions maintained by the two cruise missile support activities; the library of all missions resident on the mission distribution system.

**material conditions.** The progressive steps through which ships attain the battle condition to provide maximum practicable watertight, firetight, and fumetight integrity. All combatant ships are three-condition ships: XRAY, YOKE, and ZEBRA (the latter being the battle condition).

**maximum sonar speed.** The maximum speed at which an individual ship can proceed without unacceptably degrading its sonar performance.

**maximum speed.** The highest speed at which a ship is capable of proceeding when using full power.

**maximum towing speed.** In mine warfare, the speed through the water that may not be exceeded without causing damage to the mine countermeasures gear or the towing vehicle.

**MCM level (M).** In mine warfare, the average number of times that a representative mine is exposed to a mine countermeasures system.

**meaconing, intrusion, jamming, and interference (MIJI).** A program that identifies and provides a means to counter foreign electronic warfare efforts to probe, harass, deceive, and deny friendly use of communications and electromagnetic resources.

**mean detection range (MDR).** In underwater acoustics, the range at which there is a 50-percent chance of detecting a particular target with a particular figure-of-merit and propagation-loss profile.

**mean sea level (MSL).** The average height of the surface of the sea for all stages of the tide, used as a reference surface for elevations.

**mechanical sweeping.** The countering of mines by physically contacting the mine cases or by severing the mooring cables. Also see “mechanical sweep” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doc-trine/jel/doddict/index.html>

**median detection range (MDR).** In underwater acoustics, the range at which there is a 50-percent chance of detecting a particular target with a particular figure-of-merit (FOM) and propagation-loss (PL) profile. It is the range where the FOM line first intersects the PL curve.

**medical regulating control center (MRCC).** The coordination center for movement of casualties within and out of a naval task force. Normally located with the flagship, the MRCC is supervised by the medical regulating control officer.

**memorandum of agreement (MOA).** A document that clarifies specific actions and responsibilities, concerning an event or process, between two or more activities.

**memorandum of understanding (MOU).** A document that specifies actions and responsibilities to be performed by the provider and receiver but only in general terms. Where applicable, an MOU should be backed by an inter-Service support agreement.

**military situation.** A situation involving any action by a foreign military or subversive force that intentionally poses a clear and present danger to the security of the United States or any of its forces, territories, or possessions. The hostile forces must use, have used, or threaten to use deadly force.

**military standard (MIL-STD).** A prescribed engineering method or related practice that, when referenced in a contract, becomes a mandatory procedure for suppliers to follow in furnishing material to the military. An example is MILSTD-100 (Engineering Drawing Practices).

**mine actuation level (MAL).** The change in magnitude of the field, rate of change of field, etc., required to actuate a mine.

**mine countermeasures (MCM).** In naval mine warfare, the means that include all offensive and defensive measures for countering a mine threat, whether it be the prevention of enemy mine laying activity, ship self-protection, or locating and neutralizing mines. Also see DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**mine countermeasures objectives.** Four specific types of mine countermeasures (MCM) objectives have been identified that respond to the different needs/requirements of the MCM force: exploratory/reconnaissance, breakthrough, attrition, and clearing.

**mine danger area (MDA).** An area, varying in size, circumscribing the position of each discovered mine for an initial minefield estimate.

**mine exploitation.** The process of recovering, rendering safe, and analyzing the mine, its sensors, and system to determine the mine countermeasures necessary to sweep or hunt mines. This technique uses explosive ordnance disposal personnel to render-safe, recover, and field-evaluate a mine.

**mine locating.** The procedure that detects, accurately locates, and/or identifies mines after they have been laid. It includes techniques that reveal the presence of mines without disturbing them.

**mine neutralization.** An action using external means to render a mine incapable of detonating on the passage of a target, although it may remain dangerous to handle.

**mine sensitivity.** A measure of the threshold level at which a mine's sensors and firing logic will respond to target influence signals, as determined by the variable settings available on the mine.

**mine sweeping.** The technique of searching for or clearing mines that physically removes or destroys the mine, or produces the influence fields necessary to actuate it. Also see "minesweeping" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**mine warfare commander (MIWC).** Under the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for mine warfare and granted the tactical control authority to accomplish the assigned missions and tasks.

**mine warfare pilot (MWP).** A comprehensive collection of environmental and geographic data as well as mine and mine countermeasures environmental characteristics for a specific area.

**minefield activation.** An occurrence wherein the first mine of the field becomes armed.

**minefield category.** A classification of the minefield as offensive, defensive, or protective.

**minefield clearance.** An operation designed to remove all mines from an area.

**minefield length.** That dimension of a minefield segment parallel to the anticipated target track. The transit distance through the minefield.

**minefield threat.** The probability of a vessel detonating at least one mine on each pass through the field.

**minefield width.** That dimension of the minefield segment that is perpendicular to the anticipated target track. The width is across the front of the minefield.

**minelaying.** Placement of naval mines (air, surface, and subsurface launched) to achieve a planned tactical/logistic advantage over specific ocean, harbor, lake, or river areas and associated waterborne traffic.

**minimum mine spacing.** Minimum mine spacing refers to the least distance the weapons must be separated in order to prevent failure or sympathetic detonation.

**minimum towing speed.** In mine warfare, the slowest speed through the water at which it is possible to proceed with mine countermeasures gear streamed and still counter mines.

**mining.** One of two distinct subdivisions of mine warfare, mining embraces all methods whereby naval mines are used to inflict damage on adversary shipping to hinder, disrupt, and deny adversary sea operations.

**mission.** The data elements that are assembled by the weapon control system to program a TLAM to attack a specific aim point. Mission data includes the aim point, warhead fuzing, allowable missile variants/subvariants, terminal maneuver, navigational information, flightpath and in-flight commands, and the launch basket.

**mission abort damage.** In mine warfare, that level of damage necessary to prevent a target vessel from completing the mission it was assigned. A mission abort would not be repairable at sea but may not be so severe as to cause immediate sinking or destruction.

**mission analysis.** In TLAM operations, the TLAM planning system process that estimates specific mission performance parameters. These estimates are made using the navigation, clobber, defense systems, and performance analyses modules.

**mission data update (MDU).** In TLAM operations, the process of electronically transmitting new mission data from a mission distribution system (MDS) to units that have already received their mission data transport devices or MDS tapes.

**mission distribution system (MDS).** In TLAM operations, a computer system and application software supported by the Cruise Missile Program Office to distribute TLAM missions created by the TLAM planning system. MDS is used to plan TLAM strikes or to transmit or relay MDUs. It also functions as a data base and Tomahawk inventory/accountability management tool.

**mission load allowance.** List of ordnance required to be carried in support of the ship's mission, excluding the ship's own armament. Mission load allowance is generally applicable to aircraft carriers, maritime prepositioning ships, amphibious warfare ships, destroyers, and submarine tenders.

**mixed layer.** The upper layer of the ocean that has been mixed by wave action, thus having the same temperature. Also see mixed layer depth.

**mixed layer depth (MLD).** The point of maximum near-surface temperature.

**mobilization planning.** The process of preparing for war or other emergencies by which the armed forces, or part of them, are brought to a state of readiness for war or other national emergency by assembling and organizing reserve personnel, supplies, and material for active military service.

**monopulse radar.** A simultaneous lobing radar that measures both azimuth and elevation directions of a target on the basis of a single pulse and measures range in the conventional fashion.

**monostatic.** In underwater acoustics, refers to the case in active sonar where the active source and the receiving hydrophone are co-located. Also see bistatic and multistatic.

**multipath propagation.** In underwater acoustics, the process or condition in which sound travels between two points in the ocean (especially source and receiver) via more than one path, generally considered detrimental to sonar operations.

**multiplex (MUX).** The technique of combining two or more independent communication channels. Also see "multiplexer" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**multistatic.** Refers to the case in active sonar where there is an active source and multiple receivers, some of which are separated from the source. Also see bistatic and monostatic.

**narrowband.** In underwater acoustics, signals that have their energy in a small or narrow frequency band. Bands smaller than one percent of the center frequency are considered narrow. Narrowband also refers to signal processing equipment that processes bands smaller than one percent.

**NATO Standardization Agreement.** The record of an agreement among several or all of the member nations to adopt like or similar military equipment, ammunition, supplies, and stores; and operational, logistic, and administrative procedures. National acceptance of a NATO allied publication issued by the Military Agency for Standardization may be recorded as a standardization agreement.

**naval air training and operating procedures standardization (NATOPS).** An organization and system designed to determine, promulgate, and monitor standard flight doctrine and optimum operating procedures for naval aircraft.

**naval campaign.** An operation or a connected series of operations conducted essentially by naval forces, including all surface, subsurface, air, and amphibious troops, for the purpose of gaining, extending, or maintaining control of the sea.

**naval component commander (NCC).** The service component commander responsible for Navy forces assigned to a joint operation. See “Service component commander” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**naval cooperation and guidance for shipping (NCAGS).** The provision of military cooperation, guidance, advice, assistance, and supervision to merchant shipping to enhance the safety of participating merchant ships and to support military operations.

**naval cryptology.** Action taken to exploit and attack foreign communications and other electromagnetic signals, while protecting own, for the purposes of command and control warfare, electronic warfare, signals intelligence, and signals security. Also see “cryptology” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**naval fleet auxiliary force.** Ships provided by Military Sealift Command and dedicated to fleet operations support.

**naval special warfare (NSW).** A designated naval warfare specialty that conducts operations generally accepted as being unconventional in nature and, in many cases, covert or clandestine in character. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**naval strategy.** The use of naval forces (including naval aviation and Marine forces) to achieve naval objectives determined by national strategy, with the overall objective of controlling the seas and denying to an enemy the use of those sea areas important to enemy operations.

**naval vessel protection zone.** A 500-yard regulated area of water surrounding large U.S. naval vessels that is necessary to provide for their safety or security.

**naval warfare.** The employment in combat of all naval forces to establish, maintain, and exploit control of the seas and to deny their use to an enemy. Naval warfare consists of a series of naval operations or campaigns.

**navigation countermeasures (NAVCM).** The detection and evaluation of enemy electronic aids to navigation and the use of jamming and deception to interfere with enemy use of such aids.

**negative gradient.** A water condition in which the temperature decreases with increases in depth.



**neutralization radius.** In mine warfare, the greatest horizontal distance from an exploding charge of specified use at which a mine will be neutralized.

**noise level (NL or LN).** In underwater acoustics, the acoustic intensity of the total noise background (ambient and self-noise) at the location of the receiving sensor.

**noise-limited.** That situation in which the maximum range of detection is limited by that part of background noise and own-ship noise that is detected by the sonar.

**nominal ocular hazard distance.** The distance along the axis of the unobstructed beam from the laser to the human eye beyond which the irradiance or radiant exposure during normal operation is not expected to exceed the appropriate maximum permissible exposure.

**noncombat expenditure allocation (NCEA).** The total of all Navy and Marine Corps aviation nonnuclear ordnance items authorized for expenditure for training, testing, operations, and other peacetime uses.

**noncompliant boarding.** In maritime interception operations, boarding in which there is no intelligence to indicate a threat and any or all of the following conditions are met: a) suspect vessel fails to comply with directions of the on-scene commander, b) passive measures in place are intended to delay, impede, complicate, and/or deter boarding of the suspect vessel and can be overcome by mechanical means, and/or c) passive resistance measures in place are intended only to delay, impede, complicate, and/or deter search and seizure of suspect vessel and can be overcome by mechanical means.

**nonlethal technology (NLT).** Synonymous with nonlethal weapons but also encompassing more advanced technology that is not yet available for use by military forces.

**nonmine mine-like bottom object.** In mine warfare, an object, such as an outcropping, coral reef, or man-made debris, that may give a mine-like response on minehunting sonars.

**nonmine mine-like echo (NOME).** In mine warfare, an echo from within the clutter on minehunting sonars of a nonmine mine-like bottom object.

**normal speed.** The speed at which ships are to proceed if no signaled speed has been ordered. Also see operational speed, stationing speed.

**no-strike object.** Objects that are to be protected against impact or damage to some specified level of probability during the weaponeering and targeting process. No-strike objects are identified by Unified Commander or CJTF staffs.

**not ready for issue (NRFI).** In naval supply, a term applied to items that are not in a condition to satisfy the purpose for which intended because of failure or damage.

**NOTACK area.** A stationary safe zone established by the submarine for protection against friendly attack while other ASW forces engage submerged contact(s) within a joint action area or submarine generated search area.

**nuclear material.** Traditionally, uranium or plutonium used to produce a nuclear detonation via the fission or fusion process.

**oceanic front.** The interface between two water masses having different temperature and/or salinity characteristics. A tactically significant front will have a large effect on sound transmission and propagation loss.

**offensive mine countermeasures.** Actions taken to prevent an enemy from laying mines, including destruction of mine stockpiles and mining platforms or the placement of mines in friendly waters to thwart the enemy's ability to deliver mines.

**offensive mining.** Operations in enemy waters designed to deny, disrupt, or destroy their shipping.

**offload control officer (OCO).** The Navy officer responsible to the Navy support element commander for the offload of the maritime prepositioning ships squadron, the ship-to-shore movement, and the reception and control of lighterage on the beach.

**offload preparation party (OPP).** A temporary task organization of Navy and Marine maintenance, embarkation, equipment operators, and cargo handling personnel deployed to the maritime prepositioning ship's squadron before or during its transit to the arrival and assembly area to prepare the ship's offload systems and embarked equipment for offload. Also see "off-load preparation party" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**offshore asset.** For the conduct of inshore undersea warfare, a strategic, economic, or military asset located seaward of the highwater mark that is essential to U.S. interests and policies. Also see "offshore assets" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**open-loop sweep.** In mine warfare, a magnetic sweep that uses seawater to complete the circuit.

**operating mode.** In ASW, a term used in reference to whether a submarine is submerged, snorkeling, or operating on the surface.

**operating target (OPTAR).** An estimate of the money required by an operating ship, staff, squadron, or other unit to perform the task and function assigned.

**operating tempo (OPTEMPO).** Level of operations and training over time. Common measurements include fleet hours, track hours, ship steaming days, and rounds of ammunition.

**operational capability.** Ability to perform a stated operational function. Description of the degree of capability includes: a. identification of a function, b. indication of a degree or level of performance, and c. indication of the probability that such performance would be forthcoming if called for on short notice.

**operational category.** A classification or grouping of operational functions with specified common characteristics.

**operational function.** Detailed statement of an action for which a unit is designed, organized, or required to perform in the accomplishment of assigned or designed missions.

**operational logistics.** The art of applying the military resources available to operating forces to achieve national military objectives in a theater or area of operations or to facilitate the accomplishment of assigned missions in a military region, theater, or campaign. At the operational level of war, logistics involves fundamental decisions concerning force deployment and sustainability functions in terms of identifying military requirements, establishing priorities, and determining allocations necessary to implement the commander's concept.

**operational profile.** For information operations/information warfare, the collection of friendly indicators (visual, electronic, acoustic) or patterns associated with various naval operations that are observable to an adversary or potential adversary or detectable by adversary or potential adversary systems.

**operational speed.** The highest speed at which a ship will be required to proceed during a particular operation or during a stated period. Also see normal speed, stationing speed.

**operational support aircraft (OSA).** DOD-owned or controlled aircraft dedicated primarily on an intratheater basis to provide command transportation support.

**opposed boarding.** In maritime interception operations, boarding in which any or all of the following conditions are met: a) passive resistance measures in place are clearly intended to inflict harm on the boarding team



or create a dangerous environment, b) intelligence indicates a possible threat onboard the suspect vessel, or the vessel is suspected of carrying terrorist contraband, and/or c) the suspect vessel has demonstrated intent to actively oppose the boarding or intelligence indicates such intent exists.

**optical density (OD).** A unit of measurement that designates a material's ability to absorb energy. OD required for the same laser source may vary depending on the distance and magnification of the optics that may be in use. Unaided OD is calculated by assuming that the eye is at the laser output, while aided OD is calculated assuming all energy is focused into the 7-mm pupil.

**optimum MCM speed.** Speed over ground for a given set of conditions that provides the greatest sweeping or hunting rate.

**optimum sonar speed.** The speed for an individual ship at which, over a period, it can achieve the maximum swept area with its sonar in the prevailing environmental conditions.

**ordnance logistics management (OLM).** The total of all logistics functions applicable to the life cycle management of the ordnance stockpile and its deployment in support of operating forces. Includes support services provided to holders and users of ordnance assets.

**otter.** In naval mine warfare, a component of moored minesweeping gear used to laterally divert and maintain proper depth of minesweeping equipment.

**overpressure charges (OP).** In mine warfare, the use of a predetermined amount of explosives that, when detonated underwater at a known distance from a mine, creates a shock wave sufficient to neutralize it. The shock wave can cause disruption of internal components, including mechanical battery damage, electrical circuit destruction, or sensor failure. Use of an overpressure charge will usually leave an essentially intact mine case.

**over-the-horizon targeting (OTHT).** The location, evaluation, and reporting/transmission of data for a target outside the active sensor horizon of a missile firing unit by means of a target reporting unit.

**parallax.** The angle at the target formed by the lines of sight from two different stations. Train or horizontal parallax is measured in the horizontal plane; elevation or vertical parallax in the vertical plane.

**paravane.** A towed body with planes and a cutter with a means of depth keeping that displaces itself laterally and can be used as a ship protection measure against certain moored mines.

**participating unit (PU).** In tactical data link (TADIL) operations, a unit communicating directly on TADIL A pool.

**passive mine countermeasures.** Steps taken to reduce the susceptibility of vessels to mine actuation and explosion to include reduction of magnetic signature (degaussing), acoustic signature (Quiet Ship Bill), and pressure signature (slow transit while in deep water).

**passive sonar.** 1. A method of detecting and tracking submerged or surface targets by listening to target radiated sound. 2. A sonar system having only a hydrophone and capable of receiving signals but not transmitting them.

**patrol line.** The designated path of operation for patrolling units joined end-to-end to permit a continuous range of observations. The patrol line may be a straight line, a bent line, or a closed figure of any shape and with any number of sides.

**pattern minelaying.** The laying of mines in a defined pattern.

**penetration point.** 1. In mine warfare, a point through or over which the landing forces pierce the high-water

mark toward inland objectives. 2. In air defense, a control point used for reentry into the friendly air defense network. It should be located beyond the intercept zone of the friendly SAM network.

**periscope depth.** The maximum depth at which a submarine can use its periscopes when they are fully extended.

**permissible cargo.** In maritime interception operations, designated exceptions to a prohibited cargo category such as medical supplies, food stuffs, and other humanitarian aid as determined by proper authority.

**personnel tempo (PERSTEMPO).** Percentage of time in a given annual period that an individual supports operations and training away from his/her barracks, home base, or station for a period of time greater than 24 hours, to include unaccompanied duty assignments and temporary additional duty.

**phased array radar.** A radar antenna group using multiple radiating elements phase shifted to produce, transmit, and receive scanning patterns.

**picket.** A unit stationed in a prescribed position with reference to a formation or disposition or in a geographic position for a specific purpose such as air warning.

**pinger.** An active acoustic transmitter used in exercise mines to aid in location for recovery. Also used as a part of underwater navigation systems.

**ping-stealing.** A method to measure the range of an emitting sonar source by determining the difference in time between direct acoustic path and bottom reflected path of pings received.

**planned maintenance system (PMS).** Identifies planned maintenance to be performed on equipment, procedures to be followed, and tools, parts, materials, and test equipment required to perform planned maintenance.

**platform noise.** In underwater acoustics, a combination of own-ship noise, circuit noise, and cable noise that limits sonar sensitivity.

**plot lock.** The act of two or more units relating their plots together to eliminate the error between the plots caused by errors in the estimated geographical positions of the unit.

**point-of-aim correction.** The correction applied to gun range and deflection to compensate for the vertical and horizontal angles between the line of sight to the point of aim and the line from the gun to the desired point of impact.

**point target.** A target of such small dimension that it requires the accurate placement of ordnance in order to neutralize or destroy it.

**port.** A place at which ships may discharge or receive their cargoes. It includes any port accessible to ships on the seacoast, navigable rivers, or inland waterways. The term “ports” should not be used in conjunction with air facilities that are designated as aerial ports, airports, etc.

**port safety.** The safeguarding of vessel, harbors, ports, and waterfront facilities from accidents, negligence, civil disturbance, and disasters.

**position and intended movement (PIM).** The reference position of the officer in tactical command at a given time and a forecast of the course and speed expected to be made good over the ground. PIM is established to assist the return of aircraft, to aid outlying surface units (pickets) in maintaining their stations, and for rendezvous purposes.

**positive gradient.** A water condition in which the temperature increases with an increase in depth.

**power projection.** The application of offensive military force against an enemy at a chosen time and place. Maritime power projection may be accomplished by amphibious operations, attack of targets ashore, or support of sea control operations. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**prairie-masker.** A system of belts on a ship's hull (Masker) and holes in the forward and after face of each propeller blade (Prairie) designed to reduce machinery-generated noise that radiates from the ship and interferes with sonar performance.

**precision engagement.** The ability of joint forces to locate, surveil, discern, and track objectives or targets; select, organize, and use the correct systems; generate desired effects; assess results; and reengage with decisive speed and overwhelming operational tempo as required, throughout the full range of military operations.

**precursor mine countermeasures operation.** In mine warfare, operations in an area or channel using relatively safe methods and techniques to reduce the risk to mine countermeasures platforms. Also see "precursor sweeping" in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**predicted sonar range (PSR).** The ranges calculated and reported by a unit for its own sonar equipment and transducer depths that could be employed under the prevailing environmental and operational conditions on the basis usually of a 50 percent probability of detection.

**pressure hull.** The inner compartmented hull of a submarine designed to withstand sea pressure at great depths.

**prevention of mutual interference (PMI).** Measures intended to prevent collision damage to friendly submarines.

**prevention of stripping equipment (PSE).** In mine warfare, a booby trap within a mine serving as an anti-tamper device that will fire the main battery or an auxiliary charge when an attempt is made to open the mine's chamber or any other component. Also see "antirecovery device" DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html> in JP 1-02.

**primary search and rescue facility.** A specially trained and equipped air, surface, subsurface, or ground element assigned to and maintained in constant readiness for the conduct of SAR operations.

**principal warfare commander (PWC).** Under the composite warfare commander (CWC) concept and subordinate to the officer in tactical command and CWC are five principal warfare commanders: Air Defense Commander (ADC), Antisubmarine Commander (ASWC), Information Warfare Commander (IWC), Strike Warfare Commander (STWC), and Surface Warfare Commander (SUWC).

**private voluntary organizations (PVO).** Private, nonprofit humanitarian assistance organizations involved in development and relief activities. Private voluntary organizations are normally United States-based. "Private voluntary organization" is often used synonymously with the term "nongovernmental organizations."

**probability actuator.** In mine warfare, a counter-countermeasures feature in the mine firing logic designed to allow only a certain probability that a target or countermeasure signal will actuate the mine.

**probability of detection.** In underwater acoustics, the probability of detecting a given target, based on figure of merit and propagation loss as a function of range. Usually figured for a 50 percent probability of detection.

**processing grid.** In information warfare, the personnel, systems, and applications that turn information into knowledge to enable decision making. It is closely linked to, and in some cases embedded within, the sensor grid, providing the critical data fusion that generates situational awareness. The processing grid produces and updates the common operational picture of the battlespace.

**program executive office (PEO).** The office of a military or civilian official who has primary responsibility for directing several acquisition category I programs and for assigned acquisition category II, III, and IV programs.

**program manager (PM).** 1. A military or civilian official who is responsible for managing an acquisition program. 2. A manager of a function (e.g., ordnance, public safety, security, etc.) in a region.

**prohibited cargo.** In maritime interception operations, specified cargo destined for import to or export from a country designated by applicable prohibitions or resolutions.

**propagation loss (PL).** In underwater acoustics, the loss of sound intensity due to spreading and attenuation during travel through a medium on a transmission path. The reduction in signal intensity (in dB) between a point one yard from the sound source and the receiving sensor.

**propulsion mode.** Term used to describe the power plant configuration of a ship. For example, a ship with a diesel engine connected to the propeller shaft via a gear-reduction system is said to operate in the diesel-reduction mode.

**proud mine.** A ground mine that is not fully buried and thus protrudes from the seabed.

**prudent limit of endurance.** The time during which an aircraft can remain airborne and still retain a given safety margin of fuel.

**prudent limit of patrol.** The time at which an aircraft must depart from its operational area in order to return to its base and arrive there with a given safety margin (usually 20 percent) of fuel reserve for bad weather diversions.

**q-route survey.** The process of searching and mapping all significant contacts along a preplanned shipping route (channel). Also see “Q-route” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**quenching.** The reduction in underwater sound transmission or reception resulting from absorption and scattering of sound.

**query ship.** In maritime interception operations, the unit making initial contact with and conducting the query of a suspect vessel.

**radar warning receiver.** An on-board receiver providing information to the aircrew about radar energy striking the aircraft.

**radiated noise.** In underwater acoustics, the spectrum level of the sound energy radiated by a platform. Machinery and propeller noise dominate, but hydrodynamic noise is also a factor. It is normally expressed as a sound level in dB/1 mPa referenced to a distance of one yard from the source in a 1-Hz bandwidth.

**radioactive cloud.** An all-inclusive term for the cloud of hot gases, smoke, dust, dirt, and debris from a weapon and the environment.

**radioactive contamination.** Radioactive material in an undesirable location such as on structures, areas, objects, or personnel.

**random antiterrorism measures (RAMs).** Random multiple security measures that, when activated, serve to disguise the actual security procedures in effect; RAMs deny the terrorist surveillance team the opportunity to accurately predict security actions.

**random-look mechanism.** In mine warfare, a multi-look mine firing mechanism responding to two or more looks in either direction and in any sequence.

**rarefaction.** In underwater acoustics, the condition in a sound wave where the pressure is lower than the average pressure exerted by the medium in which the wave propagates.

**ray path.** In underwater acoustics, a path perpendicular to the acoustic wavefront as the wave travels through the water.

**ray trace.** A graphical determination of the path followed by a single ray of radiant energy as it travels through media of varying index of refraction.

**reach back.** The ability to exploit resources, capabilities, expertise, etc., not physically located in the theater or joint operations area when established. Also see “reachback” in DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**readiness analysis.** The process of determining how changes in resources or environmental conditions can be expected to affect the performance and capabilities of units. Readiness analysis leads to determination of readiness standards, determination of readiness, and determination of resources needed to achieve desired levels of readiness.

**readiness evaluation.** Description of capabilities possessed in comparison with capabilities required. Readiness may be described in terms of: a) capabilities “possessed” or “nonpossessed” in relation to appropriate readiness standards, b) probability of rendering a specified degree or level of performance, or c) general readiness categories prescribed by the Joint Chiefs of Staff combat readiness reporting system.

**real-time system.** A system into which data flows and is processed at a rate that corresponds to the rate of change of applicable information.

**rear area security.** The measures taken before, during, and/or after an enemy airborne attack, sabotage action, infiltration, guerrilla action, and/or initiation of psychological or propaganda warfare to minimize the effects thereof.

**receiving sensitivity (RS).** In underwater acoustics, a measure of the conversion factor from sound level in the water to voltage level at the output of the sonar, expressed in units of dB//1  $\mu$ Pa/volt.

**recognition differential (RD).** In underwater acoustics, a particular value of signal-to-noise ratio for a given processor that provides a 50 percent probability of target detection expressed in dB.

**reconnaissance operation.** In mine warfare, that portion of the exploratory-reconnaissance phase designed to make rapid assessment of the limits and density of a minefield.

**reconstitution.** Those actions that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources. Reconstitution operations include regeneration and reorganization.

**recovery.** In mine warfare, the removal of a mine as nearly intact as possible to permit further investigation for intelligence and/or evaluation purposes. Also see removal and DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**redeployment.** The transfer of a unit, an individual, or supplies deployed in one area to another area, or to another location within the area, or to the zone of interior for the purpose of further employment. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**redistribution.** The act of effecting transfer in control, utilization, or location of materiel between units or activities within or among the military services or between the military services and other Federal agencies. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**reference level.** In underwater sound, the standard level to which other sound levels can be related. Three reference levels commonly used are 1 dyne/cm<sup>2</sup> (= 1  $\mu$ bar), 0.0002 dyne/cm<sup>2</sup>, and 10<sup>-5</sup> dyne/cm<sup>2</sup> (= 1  $\mu$ Pa).

**reflection loss.** In underwater sound, the component of propagation loss resulting from imperfect reflections at the ocean boundaries.

**refraction.** In underwater acoustics, the bending or curving of a sound ray that results when the ray passes from a region of one sound speed to a region of a different speed. The amount of ray bending is dependent upon the amount of difference between sound speeds, that is, the variation in temperature, salinity, and pressure of the water.

**regeneration.** Rebuilding of a unit through large-scale replacement of personnel, equipment, and supplies, including the reestablishment or replacement of essential command and control and the conduct of mission essential training for the newly rebuilt unit. Also see reconstitution and reorganization.

**regulated navigation area.** A water area within a defined boundary for which regulations for vessels navigating within the area have been established.

**release criteria.** Criteria laid down by the officer in tactical command or delegated authority to be satisfied before weapon employment is authorized.

**release delay.** In mine warfare, a device fitted to a moored mine or sinker to delay the rising of the mine case, either for a preset interval or until the influence of a passing target or sweep is received.

**removal.** In mine warfare, to take a mine out of an area where its detonation would present an unacceptable circumstance.

**render safe.** As applied to weapons and ammunition, the changing from a state of readiness for initiation to a safe condition.

**reorganization.** Action taken to shift internal resources within a degraded unit to increase its level of combat effectiveness. Also see reconstitution and regeneration.

**replenishment.** In mine warfare, replacement or addition of mines to a minefield. Also known as reseeding.

**required delivery date (RDD).** The Julian calendar date when material is required by the requisitioner. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**requirements.** The inputs to a mission, objective, or capability. They are subdividable into ever smaller and simpler components until they cannot be divided any more without losing meaning.

**rescue destroyer.** A ship stationed in the vicinity of an aircraft carrier for the purpose of rescuing downed aircraft personnel. It may have the additional function at night of acting as reference ship to indicate the horizon for takeoff and the landing pattern for recovery operations. Formerly referred to as "plane guard."

**rescue helicopter.** A helicopter stationed in the vicinity of a base, ashore or afloat, and used independently for rescuing downed aircraft personnel.

**rescue vessel.** Surface craft possessing inherent seagoing qualities, long range, and reasonable speed engaged in a SAR mission.



**reverberation.** In underwater acoustics, the combined sound of many small echoes returned to the hydrophone due to scattering at the ocean surface (surface reverberation) and at the bottom (bottom reverberation), and/or scattering in the water mass (volume reverberation). Examples of sources of reverberation are air bubbles and suspended solid matter.

**reverberation level (RL).** In underwater sound, the ratio of the acoustic intensity, expressed in dB units, produced by pertinent scatters (volume, sea surface, or bottom) as a function of source level and range.

**reverberation limited.** In underwater acoustics, the condition in active sonar when the reverberation interference level is higher than the background noise level. In this case, reverberation limited replaces total background noise in the active sonar equation.

**right of approach and visit.** The right under international law, of a warship, military aircraft, or other duly authorized ship or aircraft to approach any vessel in international waters to verify its nationality. Unless the vessel encountered is itself a warship or government vessel of another nation, it may be stopped, boarded, and the ship's documents examined, provided there is reasonable ground for suspecting that it is: a) engaged in piracy, b) engaged in the slave trade, c) engaged in unauthorized broadcasting, d) without nationality, or e) of the same nationality as the warship though flying a foreign flag or refusing to show its flag.

**risk management (RM).** The systematic process of identifying, assessing, and controlling risks arising from operational factors and making decisions that weigh risks against mission benefits.

**riverine patrol.** A patrol by waterborne forces in waters measured from the low-water mark of the extreme reaches of the river mouth to the limit of navigable headwaters.

**run.** The transit of a mine countermeasures (MCM) platform and MCM gear combination along a track. A run produces a swept path and may cause more than one actuation in a mine. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**safe speed.** In mine warfare, the speed at which a particular ship can proceed without actuating a given influence mine within the damage area at the depth under consideration.

**salinity (S).** The amount (in grams) of total dissolved salts present in one kilogram of water. This is equivalent to parts per thousand (ppt or ‰).

**scattering.** In underwater acoustics, the reduction in sound intensity caused by reflection of energy away from the wave propagation path.

**scattering strength.** In underwater acoustics, the ratio (in dB) of scattered sound from a surface or volume, referred to a distance of one yard, to the incident plane-wave intensity (energy per unit area or volume).

**screen commander.** An officer appointed by the officer in tactical command to exercise specific tactical control functions relating to the screen.

**sea combat.** The broad functional integration of ASW and surface warfare disciplines for sea control to the extent and duration necessary for mission fulfillment; other warfare commander and coordinator positions also may be included as desired by the officer in tactical command/composite warfare commander.

**sea combat commander (SCC).** Under the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for sea combat and granted the tactical control authority to accomplish the assigned missions and tasks; this is an optional position within the composite warfare commander structure.

**sea current.** In SAR operations, that current present in the open sea that is caused by factors other than local winds.



**sea state.** A numerical or written representation of the roughness of the ocean surface.

**sea state limited.** In underwater acoustics, the condition when sea surface noise is the predominant source of background noise.

**seaport of debarkation (SPOD).** The port at which cargo or personnel are discharged.

**seaport of embarkation (SPOE).** The port in a routing scheme from which cargo or personnel depart to a seaport of debarkation. For unit and nonunit requirements, it may not coincide with the origin.

**search and rescue (SAR) area.** A general term for any geographically defined area of SAR responsibility. Also a term used by the International Civil Aviation Organization (ICAO) to describe its areas of international SAR responsibility. ICAO uses the abbreviation SRR.

**search and rescue coordinator (SC).** The official (or agency in the case of regions) responsible for the SAR organization within a given area and for the coordination of SAR operations within that area.

**search and rescue incident.** Any situation that requires notification and alerting of the SAR system and which may require SAR operations.

**search and rescue region.** A region described in the national SAR plan in which a single Federal agency coordinates all Federal SAR operations. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doc-trine/jel/doddic/index.html>

**search and rescue stage.** One of five stages of an SAR operational problem. a) awareness stage: that stage when the SAR system becomes aware of an incident, b) initial action stage: that stage when preliminary action is taken to alert SAR facilities and obtain amplifying information, c) planning stage: that stage when an effective plan of operations is developed, d) operations stage: that stage when SAR facilities proceed to the scene, conduct search, rescue survivors, assist distressed craft, provide emergency care for survivors needing it, and deliver injured to a suitable medical facility, and e) mission conclusion stage: that stage when SAR facilities return to their regular location and are prepared for another mission.

**sea-surface noise.** In underwater acoustics, noise caused by the action of surface waves. Sea-surface noise is the predominant source of ambient noise in the open ocean.

**security zone.** In naval coastal warfare, an area of land, water, or land and water that is so designated by the captain of the port or district commander for such time as is necessary to prevent damage or injury to any vessels or waterfront facility; to safeguard ports, harbors, territories, or waters of the United States; or to secure the observance of the rights and obligations of the United States.

**seismic mine.** A version of a passive acoustic mine that uses geophonic elements to detect acoustic energy emanating from a ship. A mine that responds to the acoustic energy transmitted through the ocean bottom rather than through the water.

**seizure.** The taking into custody of a vessel, evidentiary items, and/or contraband.

**self-noise.** In underwater acoustics, any noise resulting from the presence or movement of own-ship, including flow, mechanical, electrical, and electronic noises. It may enter the own-ship listening gear directly or by an airborne, waterborne, or structuralborne path. Also see acoustic noise, ambient noise, background noise.

**self-noise limited.** In underwater acoustics, the condition when self-noise is the predominant source of background noise. This occurs when a ship or submarine is traveling faster than its breakpoint speed.

**self-protective mine countermeasures (SPMCM).** Tactical active and passive countermeasures taken by a ship to reduce the levels of its emitted influence signatures. Examples are slow speed and use of degaussing systems.

**sensitive mine.** A mine whose detecting circuit requires a relatively small magnitude of influence (as from a slow, small, quiet, and degaussed vessel) to actuate it.

**sensitivity.** 1. In underwater acoustics, the measure of how well a device converts sound level to voltage level. Measured in dB/ $\mu$ Pa/volt. 2. In mine warfare, a classification of a mine's likelihood to actuate by an influence field; the higher the sensitivity, the smaller the magnitude of the influence required. It is a qualitative term and, if a measurement is to be included, the specific term "actuation level" should be included.

**sensor grid.** In information warfare, the air, sea, ground, space, and cyberspace sensors, weapons sensors, sensors employed by individual sailors and marines, and embedded logistics sensors that collect information.

**service force.** A naval task organization that performs missions for the logistic support of operations.

**set.** The direction toward which a current flows or the direction toward which an object moves under the influence of wind or current. Also see drift.

**shadower.** A maritime unit observing and (not necessarily continuously) maintaining contact with an object; shadowing may be conducted overtly or covertly. Also see marker, shadowing.

**shadowing.** The observation of an enemy unit of force, usually as a sequel to surveillance or reconnaissance, for the purpose of reporting its composition, location, movement, and any other relevant information. Also see marker.

**shadow zone.** In underwater acoustics, a region in which very little sound energy penetrates, depending upon the strength of the lower boundary of the surface duct. It is usually bounded by the lower boundary of the surface duct and the limiting ray. There are two shadow zones: the sea surface, beneath which a shadow is cast by the surface in the sound field of a shallow source, and the deep-sea bottom, which produces a shadow zone in the upward-refracting water above it.

**shallow water.** 1. For underwater acoustics, normally considered as being less than 100 fathoms. Usually considered to be water of such depth that bottom topography affects surface waves. Only refers to the vertical extent from the ocean/atmosphere interface to the bottom of the ocean. Acoustically defined as water depth that will not support convergence zone or deep sound propagation paths. 2. For the conduct of inshore undersea warfare, the water mass extending from the mean high-water mark ashore to the 100-fathom curve seaward.

**shelf break.** The line across which there is a marked increase of slope at the outer margin of a continental shelf.

**shipping risk area (SRA).** A geographically defined portion of the naval cooperation and guidance for shipping (NCAGS) area where an elevated risk to merchant shipping exists. Risks can include potentially hostile acts, navigational restrictions that require closer management of shipping traffic, or naval force operations that may conflict with routine safe passage. More than one SRA can be established within an NCAGS area. SRAs are established by the task force commander.

**short-term operation.** In mine warfare, sweeping or hunting carried out when the time available before ships pass through a mined area is insufficient to execute clearance.

**signaled course.** The true course that is being or that is to be steered.

**signaled speed.** The speed in knots at which the guide has been ordered to proceed.

**signal excess (SE).** In underwater acoustics, the difference in dB between received signal-to-noise ratio and recognition differential. This is equivalent to the received signal level in dB in excess of that required for a 50-percent probability of detection.

**signal-to-noise ratio.** In underwater acoustics, the difference in decibels between the received signal and the received noise. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**signature.** A set of characteristics of a weapons system or platform useful for its detection, characterization, tracking, and engagement. These characteristics are generally considered to involve radar cross section, infrared (IR) emissions, acoustic emissions, avionic subsystem emissions, visible and IR reflectivity and, in mine warfare, pressure and magnetic influences.

**single-ping, 50-percent probability-of-detection range.** In underwater acoustics, that range at which the signal excess becomes zero. The median detection range and the inner- and outer-range rings of the bottom-bounce annulus and convergence-zone annulus are each determined by this probability-of-detection criterion.

**situational awareness (SA).** Knowledge and understanding of the current situation that promotes timely, relevant, and accurate assessment of friendly, enemy, and other operations within the battlespace in order to facilitate decision making. An informational perspective and skill.

**skip bombing.** A method of aerial bombing in which a bomb is released from such a low altitude that it slides or glances along the surface of the water or ground and strikes the target at or above water level or ground level.

**skip-track sequence.** In mine sweeping, a run sequence where distance between tracks swept is in multiples of normal track spacing. One run is made on each track, and then the tracks are repeated in the same order until all required runs per track have been accomplished.

**slope enhancement.** In underwater acoustics, a phenomenon where the intensity of a sound transmission is altered as it encounters changing bottom slopes.

**Snell's Law.** When a wave (light or sound) travels obliquely from one medium to another, the ratio of the sine of the angle of incidence to the sine of the angle of refraction is the same as the ratio of the respective wave speeds in the mediums and is a constant for two particular media.

**snorkel.** An extensible breather pipe that enables a submarine to operate on diesel engines while remaining submerged.

**SOFAR channel.** In underwater acoustics, the deep sound channel with its axis at the bottom of the main thermocline. The name originates from the WWII sound fixing and ranging (SOFAR) system designed for locating aviators downed at sea.

**sonar background noise.** In underwater acoustics, the total noise that interferes with signal reception.

**sonar signal differential.** In underwater acoustics, the signal-to-noise ratio (with noise measured in the system bandwidth) required for a 50 percent Pd.

**sonic layer depth (SLD).** The depth of maximum near-surface sound speed above the deep sound channel.

**sound channel.** In underwater acoustics, that region in the water column where the sound speed first decreases to a minimum value with depth and then increases in value, due to pressure. Above the depth of minimum value, sound rays are bent downward; below the depth of minimum value, rays are bent upward, resulting in the rays being trapped in this channel and permitting their detection at great ranges from the sound source.

**sound channel axis.** The depth of minimum sound speed within a sound channel. Abbreviated as DSCA for the deep sound channel axis or SSCA for the secondary sound channel axis.

**sound intensity.** In underwater acoustics, a value equal to the square of the sound pressure divided by the impedance of the water.

**sound pressure level (SPL).** In underwater acoustics, an indirect measurement of sound pressure based on a logarithmic relationship. A range of one million sound pressures is represented by 120 units of sound pressure level. The unit of measurement is the decibel.

**sound speed.** In underwater acoustics, the rate of travel at which sound energy moves through a medium, usually expressed in feet per second or meters per second.

**sound speed excess (SSE).** In underwater acoustics, the difference between the sound speed at the ocean bottom and at the bottom of the surface layer.

**sound speed gradient.** In underwater acoustics, the rate of change of sound speed with depth in the ocean.

**sound speed profile (SSP).** In underwater acoustics, a graph of the variation of sound speed with water depth.

**sound velocity profile (SVP).** In underwater acoustics, a graph of the variation of sound speed versus depth of the ocean, taking into account the vertical distribution of temperature, salinity, and pressure. SVP is used for predicting sonar conditions.

**source level (active).** In underwater acoustics, the total power output of an active transducer in dB/ $\mu$ Pa at one yard from the transducer.

**source level (passive).** In underwater acoustics, the amount of acoustic energy in dB radiated omnidirectionally by the target at a particular frequency. Source level is generally expressed as the average plane wave-radiated acoustic intensity in a 1-Hz band at a reference distance of one yard from the source and relative to a reference intensity of 1  $\mu$ Pa.

**southern oscillation.** Multiyear variation in the surface temperature of the equatorial Pacific, which appears to have far-reaching effects on worldwide rainfall and temperature patterns.

**special agreement vessel.** In maritime interception operations, a vessel covered by special agreements or policies for which specific alternatives to visit and search are mandated. Passenger ferries and cruise ships may be included in this category.

**special interest vessel.** In maritime law enforcement, certain vessels registered in nations with whom the United States does not enjoy friendly and/or normal diplomatic relations and that are subject to restrictions regarding their entry into or activities in U.S. waters.

**spectrum level.** In underwater acoustics, the level of noise or a broadband signal in a frequency band 1-hertz (one cycle per second) wide.

**specular reflection.** A mirror-like reflection of sound rays from the ocean surface or bottom, or a target, having small irregularities compared with the wavelength of the incident sound.

**speed made good.** The average speed maintained over a known distance, taking into account all physical and environmental factors (weather, tidal stream, current, and state of ship's hull and machinery).

**speed of advance (SOA).** In naval usage, the speed expected to be made good over the ground. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**spherical spreading.** In underwater acoustics, a form of divergence governed by the inverse-square spreading law where sound energy decreases 6 dB every time the distance from the source is doubled.

**splash line.** In SEAL team night operations, a point off the enemy beach where swimmers are put into the water from rubber boats. It must be sufficiently distant to allow completion of this phase without detection.

**spread.** In naval gunnery, the range spread of a salvo is the distance between the round falling or bursting at the greatest distance from the firing point and the round falling or bursting at the shortest distance, excluding wild rounds. Similarly, the line spread is that which is at right angles to the trajectory.

**spreading.** In underwater acoustics, the phenomenon whereby transmitted sound intensity decreases in a constant relationship to distance from the source.

**spreading loss.** The phenomenon whereby transmitted sound intensity decreases in a constant relation to distance from the sound source. The spreading laws relate sound intensity to a ratio of distance from the sound source.

**standard distance.** Unless otherwise ordered, 500 yards between small ships in a line and 1,000 yards between a large ship and any other ship, large or small, in a line.

**standoff ASW action.** An action in which one or more ASW units attempt to engage a submarine outside 8,000 yards.

**static haven.** In submarine operations, an area or zone established at any time by a submarine operating authority or officer in tactical command reserved exclusively for navigational use by a submarine. Also see “moving submarine haven” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**static pressure.** The portion of the total pressure in the ocean that increases with depth and does not vary with time. (The pressure that would exist in the ocean if no sound waves were present.)

**stationing speed.** A speed slower than operational speed, specified for reasons of fuel economy, for use when maneuvering or changing station. Also see normal speed, operational speed.

**stave.** A vertical group of individual hydrophone elements, electrically summed before being time delayed in the sonar beam former.

**stovepipe.** A column of water made available to a submarine assigned to a deep stratum that allows it access to the surface. Typically used in conjunction with prevention of mutual interference plans during exercises involving friendly and opposition force submarines.

**strategic readiness requirement (SRR).** As applicable to naval ordnance, the quantity of munitions needed to arm the forces not committed to support combat operations in the assigned major theater war, as well as those in the strategic reserve. This also includes any additional munitions requirements generated from treaties or statutory obligations to allies.

**stratification.** In reference to naval ordnance, the application of assets to requirements to determine deficiencies, sufficiencies, or excesses.

**strike operation.** An operation designed to inflict damage on, seize, or destroy an objective.

**strike package.** An aggregation of one or more individual missions, including TACAIR and TLAM, combined to meet macro-level strike warfare objectives.



**strike planning.** The generation of a plan for employing one or more strike and support assets against one or more targets. Strike planning includes decisions on which weapon systems to employ and coordination of timing, support, and proximity between TLAM with TACAIR.

**strike warfare (STW).** Naval operations to destroy or neutralize enemy targets ashore, including attacks against strategic or tactical targets such as manufacturing facilities and operating bases from which the enemy is capable of conducting or supporting air, surface, or subsurface operations against friendly forces.

**strike warfare commander (STWC).** Under the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for strike warfare and granted the tactical control authority to accomplish the assigned missions and tasks.

**subbottom.** In underwater acoustics, the variation in density and structure of the ocean floor. With the penetration of the ocean floor by lower frequencies, density and structure of the layers of materials making up the near-surface bottom region must be considered in acoustic range propagation.

**submarine action area.** A waterspace management area that contains one or more friendly submarines that are the only units that may use ASW weapons within that area.

**submarine advisory team (SAT).** Personnel assigned to the submarine operations coordinating authority to assist in the planning and execution of coordinated submarine operations.

**submarine danger zone.** The area within the appropriate limiting lines of approach.

**submarine depth.** The depth of the submarine's keel.

**submarine element coordinator (SEC).** Under the composite warfare commander concept, the principal advisor to the submarine operations coordinating authority (SOCA) for submarine operations, normally serving as the SOCA staff intermediary for required liaison with the submarine operating authority and submarines.

**submarine-generated search area (SGSA).** A temporary tactical operating area within a joint action area that is established by a submarine commanding officer to allow other ASW forces to attack subsurface contacts outside of the SGSA without further contact with the submarine. Also referred to as a "BULLPEN."

**submarine movement advisory authority.** The authority who monitors movements of submarines and ships operating variable depth sonar or towed arrays within his area of responsibility and advises the submarine operating authorities and, if necessary, units concerned, of possible mutual interference.

**submarine notice (SUBNOTE).** A message originated by the submarine operating authority providing operational and movement instructions for submarines in peace and war, including transit and patrol area information.

**submarine operations coordinating authority (SOCA).** A command to which tactical control of one or more submarines has been delegated by the submarine operating authority.

**submarine safety lane (SSL).** A special case of submarine action area consisting of a set of lanes, either geographically defined or superimposed on a grid. They are activated either wholly or in part by the submarine operating authority (SUBOPAETH) and are used by the SUBOPAETH to ensure the safety of submarines transiting to and from assigned areas.

**submerged approach area.** That limited area in which the approach must be initiated by a submerged submarine to reach a firing position in the torpedo danger zone. This area is limited by the ratio of speed of the submarine to that of the target.



**surface action group (SAG).** A unit comprised of surface ships, which may be supported by fixed-wing aircraft or helicopters, formed to counter a surface threat. Unless the officer in tactical command has designated a SAG commander, the senior of the commanding officers is the SAG commander.

**surfaced submarine.** A submarine operating on the surface, i.e., sail and main deck awash or breaking the surface.

**surface duct (SD).** In underwater acoustics, a zone below the sea surface where sound rays are refracted toward the surface and then reflected. The rays alternately are refracted and reflected along the duct out to relatively long distances from the sound source.

**surface mine countermeasures (SMCM).** Tactics and techniques that attend the employment of mine countermeasures and coastal minehunters to detect, reduce the effectiveness of, or eliminate enemy mines through mechanical and/or influence minesweeping devices. Explosive ordnance disposal and naval special clearance teams and the marine mammal system are also integral components of this discipline.

**surface reverberation.** A term referring to scattered sound energy that is reflected back to the acoustic source after striking the surface of the ocean.

**surface warfare commander (SUWC).** Under the composite warfare commander concept, the officer delegated some or all of the officer in tactical command's detailed responsibilities for surface warfare and granted the tactical control authority to accomplish the assigned missions and tasks.

**surveillance area (SA).** In maritime operations, aerospace, airspace, surface, and subsurface areas under the systematic observation of own-force sensors to detect any object, event, or occurrence of possible military concern. The surveillance area is a subset of the area of operations. See also area of operations; classification, identification, and engagement area; vital area.

**survey.** A procedure for determining the cause of gains, losses, or damage to Navy property, establishing personal responsibility (if any), and documenting necessary inventory adjustments to stock records. Also see survey as applied to CBR in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**survey operations.** In mine warfare, operations to collect data on the mine countermeasures (MCM) environment. They are conducted in peacetime to ascertain the suitability of conditions for the MCM.

**suspect vessel.** In maritime interception operations, any critical contact of interest or any other vessel so designated by the combatant commander, joint force commander, naval component commander, joint force maritime component commander, or maritime interception commander.

**sustained operations.** As applicable to combat stress and significant personnel, continuous operations or combat with opportunity for less than four per 24 hours sleep, which may be brief or fragmented.

**sustained threat.** In mine warfare, the ability of a minefield segment to present a continuous threat level for a specified period of time despite the number of transitors or mine countermeasures efforts.

**sweep resistance.** In mine warfare, the counter-countermeasures quality of a mine that inhibits its actuation as a result of enemy minesweeping efforts.

**sweeping.** In mine warfare, the act of a sweeper towing and operating a sweep for mines. Term also covers the destruction of floating mines cut loose from their moorings.

**tactical air support for maritime operations (TASMO).** Organization, operational procedures, and communications used in NATO for land- or carrier-based tactical air support of maritime offensive, reconnaissance, and air defense operations.

**tactical command (TACOM).** The authority delegated to a commander to assign tasks to forces under their command for the accomplishment of the mission assigned by higher authority. This term is used primarily in maritime operations. It is narrower in scope than operational command but includes the authority to delegate or retain tactical control.

**tactical control (TACON).** In maritime usage, the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**tactical data system (TDS).** An automated real-time computer system in which tactical data are entered for storage, calculation, and/or display.

**tactical diameter.** See transfer.

**tactical evasion.** The use of evasive actions to avoid enemy detection where such actions are based on information concerning the capabilities and limitations of the enemy's detection equipment.

**tactical recovery of aircraft and personnel (TRAP).** A mission performed by an assigned and briefed aircrew for the specific purpose of the recovery of personnel, equipment, and/or aircraft when the tactical situation precludes search-and-rescue assets from responding and when survivors and their locations have been confirmed.

**tactical sonar range (TSR).** A range based on the reported predicted sonar ranges. It may make allowances for probable submarine depth, alertness of the operator, level of unit efficiency, etc.

**takedown operation.** In maritime interception operations, the act of inserting an armed boarding team on a suspect vessel to gain control of key stations and force the suspect vessel to submit to search or diversion.

**target.** 1. An area, complex, installation, force, unit, or equipment identified or planned for capture, neutralization, damage, or destruction by military forces. 2. To identify and select a specific entity or entities or a generic capability, function, or behavior for military action.

**target acquisition range.** The minimum range in miles at which the designation order must be given to a gun director system so the associated radar and fire control systems may acquire the target and obtain an accurate solution in time to open fire at the maximum effective range.

**target angle (TA).** The angle between the target track and the line of sight (LOS), measured 0° to 360° from the bow of the target to the LOS. Also see aspect and angle on the bow.

**target designation.** The selection of targets that is to be taken under fire and the transmission of the required information for acquisition to the selected fire control station or stations. It may be classified by originating station or by means used.

**target folder.** In TLAM operations, the set of data and remarks used as reference materials during targeting and weaponeering. A defined group of text and imagery materials. Also see DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**target height.** The vertical distance of a target above the horizontal plane through the point upon which the data computer or rangekeeper bases a solution. Usually measured in feet.

**target information package (TIP).** A compilation of essential information about a specific target. The package includes enemy order of battle (air, land, and sea), target description, vulnerabilities, lines of communication, general and localized photography, and other all-source intelligence.

- target location error (TLE).** The difference between the measured target location and its true location on the earth.
- target resolution.** The minimum difference in bearing, range, or elevation between two targets that will allow obtaining data on either target.
- target strength (TS).** In underwater acoustics, a measure of the reflecting power of the target stated in dB. The ratio of the target echo is measured one yard from the target to the sound incident on the target.
- task designator.** The number assigned to a task force, task group, or task element.
- task fleet.** A mobile command of ships and aircraft necessary for accomplishing specific major tasks that may be of a continuing nature.
- task group submarine area (TGSA).** A waterspace management area designated by the submarine operating authority in which one or more submarines are operating under the tactical command of the task group officer in tactical command (OTC). Waterspace management and prevention of mutual interference requirements within this area are the responsibility of the OTC or a specified subordinate commander.
- task organization.** The organization of forces for operational purposes to provide the necessary flexibility for meeting changing operational requirements while retaining a clear indication of the chain of command.
- task unit.** A component of a task group organized by the commander of a task group or higher authority for accomplishing specific tasks.
- team sweep.** In mine warfare, two or more minesweepers linked together by a mechanical sweep. In influence sweeping, the interaction of sweep fields is an essential feature of the technique in use (e.g., synchronization of magnetic sweep fields).
- terminal controller.** Those agencies and/or individuals who exercise terminal control of close air support missions. This control may include, but is not limited to, assisting the pilot in acquisition of the target and directing the flight routing of the aircraft relative to target attack.
- theater mission library (TML).** The library of Tomahawk missions in an area of responsibility (AOR) that has been approved for distribution by the unified commander. The TML may include locally planned missions that have not been planned or distributed by a cruise missile support activity as well as master mission library missions. Each TML is managed and distributed by the theater Tomahawk database manager for the AOR.
- thermocline.** A temperature gradient in a layer of seawater where the temperature decreases continuously with depth. Usually the gradient is greater than 2.7° F per 165 feet (1.5° C per 50 meters) of depth.
- threat probability.** In mine warfare, the probability that a target ship passing once through a minefield will explode at least one mine and be damaged to a specified level.
- time charter (TC).** In Military Sealift Command operations, under this type of contractual agreement that may last from a few weeks to years, the ship owner is responsible for providing the crew, managing the ship, and for paying all operational costs, excluding fuel, port charges, and canal tolls. Also see industry-owned, time chartered ships, and industry-owned, bareboat-chartered ships.
- TLAM strike coordinator (TSC).** Under the composite warfare commander concept, the officer in tactical command's designated agent who is responsible for all TLAM strike planning, coordination, and reporting in a strike or series of strikes.
- Tomahawk executive agent (TEA).** The commander designated by the unified commander to assume the responsibility for all Tomahawk operations in the theater.

**Tomahawk strike coordinator (TSC).** The designated agent who is responsible for all TLAM strike planning, coordination, and reporting in a strike or series of strikes.

**topographic noise stripping (TNS).** In underwater acoustics, ambient noise from distant shipping (>1 convergence zone (CZ) range away) is attenuated, or stripped, by interaction with the ocean bottom, while the acoustic signal of interest is received via the submerged CZ propagation path. TNS may be exploited in areas where the distant shipping noise is bottom-limited, but a below-layer source is not bottom-limited, resulting in an increased signal-to-noise ratio.

**topographic shading.** The disruption of convergence zone (CZ) or deep sound channel propagation by ocean bottom features such as seamounts, guyots, ridges, or islands. This disruption causes large shadow zones. Depth excess is destroyed for CZ propagation when a source is one-half the CZ range from such a bottom feature.

**torpedo danger area (TDA).** The area extending beyond the furthest-on circle for an arbitrarily assessed distance of 8,000 yards.

**torpedo danger zone (TDZ).** An area that the submarine must enter in order to be within maximum effective torpedo firing range.

**total delivery error (TDE).** In regard to precision-guided munitions, the complex combination of the target location and weapon navigation errors that indicates the closeness of the probable weapon impact to the true location of the target.

**total risk.** The sum of identified risk and unidentified risk. It is accepted by the appropriate decision-maker because further efforts at risk control are not justified by the perceived gain.

**traffic ships.** As applied to mine warfare, the normal kinds and numbers of ships using a given area, usually considered major cargo and military ships.

**transducer.** A device for converting electrical energy to underwater sound energy or vice versa. When sound energy received through the water is converted to electrical energy, the device is termed a hydrophone; when electrical energy is converted to sound energy and transmitted into the water, the device is termed a sonar projector or an echo sounder.

**transfer.** In maneuvering, the distance gained by a ship at right angles to the original course when turning. The tactical diameter is the transfer for a turn of 180°.

**transient.** In underwater acoustics, a target signal of varying duration, such as the cycling of valves or planes. May not be detected on narrowband systems due to integration period.

**transmission loss (TL).** In underwater acoustics, the reduction in signal intensity (in dB) between a point one yard from the sound source and the receiving sensor. Graphically depicted as a function of range on a computer-generated propagation loss curve.

**turbidity current.** Relative to underwater acoustics, a highly turbid, relatively dense current carrying large quantities of clay, silt, and sand in suspension that flows down a submarine slope through less dense water.

**turnaround time.** That period beginning upon conclusion of one deployment and ending upon commencement of the next deployment.

**turning circle.** The path of a ship holding to a constant rudder angle.

**type organization.** The organization of forces afloat by types of ships and aircraft for administrative purposes as distinguished from tactical purposes.

**unacceptable risk.** The risk that cannot be tolerated and must be eliminated or controlled.

**uncertainty phase.** See “search and rescue incident classification” in DOD Dictionary (JP 1-02).  
<http://www.dtic.mil/doctrine/jel/doddict/index.html>

**uncooperative boarding.** Occurs when a contact of interest’s master and crew disregard hailing and proceed on a course demonstrating intent to deny cooperative boarding.

**uncountered field.** A minefield against which the enemy takes no mine countermeasure actions.

**underwater electric potential (UEP).** Alternating and static electric fields caused by electric current flowing through dissimilar metals in a ship’s underwater hull.

**underwater mine countermeasures (UMCM).** The tactics and techniques that attend the employment of explosive ordnance disposal, naval special clearance team, and/or marine mammal system to perform minefield reconnaissance and/or acquire, reacquire, identify, neutralize, dispose of, render-safe, and exploit moored and ground mines planted within the depth capability of existing underwater breathing apparatus.

**unidentified risk.** The risk that has not been identified. It is unknown or immeasurable.

**uplink.** In submarine usage, one-way communications from a submarine.

**upslope enhancement.** Acoustic energy from a source in deep water changes from a convergence zone or sound channel path to a bottom bounce path as the bottom shoals and is concentrated up the slope to a receiver in shallow water. Also known as the inverse megaphone effect.

**urgent attack.** In ASW, an attack delivered with maximum rapidity against a submarine located in a position such that it is considered an immediate threat. Speed of reaction is more vital than accuracy. Also see deliberate attack.

**variable depth sonar (VDS).** A sonar whose transducer is towed beneath its parent ship with the object of improving sonar detection ranges by permitting the sonar to operate beneath a layer.

**vertex depth.** In underwater acoustics, the depth in the water at which a refracted sound ray becomes horizontal.

**vertex sound speed.** In underwater acoustics, the speed at which a refracted sound ray becomes horizontal.

**vertical component.** In mine warfare, that component part of the total magnetic field in the vertical plane.

**vertical launch system (VLS).** A system on surface ships that provides stowage, support, and launch capabilities for Tomahawk, standard missiles, and vertical launch antisubmarine rockets.

**vertical onboard delivery (VOD).** Logistics movement of high-priority passengers/mail/cargo to/from aviation and air-capable ships.

**visit, board, search and seizure.** Procedures by which U.S. forces conduct maritime interception operations in order to determine the true character of vessels, cargo, and passengers.

**vital area (VA).** In maritime operations, the designated zone surrounding a mission-essential unit(s), force(s), installation(s), or location(s) to be defended by the force. The outer limit of the vital area is normally equal to or greater than the threat weapons release range of opposition forces. Multiple vital areas may be established within a classification, identification, and engagement area. See also area of operations; surveillance area; and classification, identification, and engagement area.



**vital deficiency.** A deficiency that affects the operational ability of a unit to such an extent that it is in no condition to perform the mission. This deficiency might be one of material or personnel and is beyond the capacity of the unit to remedy without outside assistance.

**voyage charter (VC).** Under the terms of a voyage charter, the owner remains completely responsible for the operation of (and the associated costs of) the ship — including fuel, port, and canal charges. The charter party provides for the ship to make a transit between a specific seaport of embarkation and a specific seaport of debarkation.

**walking.** In mine warfare, a contact that is not geographically stationary as plotted on the navigation display. Used as an indication that the sonar is tracking biological life-forms (school of fish, whales, etc.).

**war reserve munitions requirement (WRMR).** The sum of combat requirement, strategic readiness requirement, and current operation/force protection requirement.

**warm core eddy.** Large warm water mass that has broken off from its parent water mass into a different water mass yet retains its specific properties for long periods (6 to 9 months) before being assimilated.

**washover effect.** Wave action that grounds out the sonobuoy antenna. Normally becomes apparent at sea state 4 and can be heard aurally and observed on radio frequency meters.

**water clearance authority (WCA).** An activity that controls and monitors the flow of cargo into ocean terminals. Also see “Ocean Cargo Clearance Authority” in DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>.

**waterfront facility.** All piers, wharves, docks, and similar structures to which vessels may be secured; areas of land, water, or land and water under and in immediate proximity to them; buildings on such structures or contiguous to them; and equipment or materials on such structures or in such buildings.

**waterside security.** Measures or actions taken to prevent or guard against the use of a waterside approach to a waterfront facility or vessel by persons or vessels intent on theft, sabotage, terrorism, and/or belligerent acts.

**waterspace management (WSM).** The allocation of surface and underwater spaces into areas and the implementation of agreed procedures to permit the coordination of assets. The intention is to prevent mutual interference between submarines or between submarines and other assets, while enabling optimum use to be made of all undersea warfare assets involved.

**wave length, sound.** In underwater acoustics, the distance between corresponding points of adjacent sound waves; measurement is determined by the ratio of speed to frequency.

**waypoint.** In TLAM operations, 1. An engagement planner-designated location through which the missile is directed to fly during the overwater phase en route to the first preplanned waypoint. Overwater waypoints are optional and flexible. 2. A mission planner-designated location through which the missile is directed to fly during the overland phase en route to the target. Overland waypoints are integral action points in the mission and cannot be changed without replanning the mission. Also see “way point” DOD Dictionary (JP 1-02). <http://www.dtic.mil/doctrine/jel/doddict/index.html>

**weapon control.** The technique of delivering effective fire on a selected target. Effective fire control is accomplished in the following sequence of operations: search, target indication, target designation, target acquisition, tracking, predicting, weapon laying, weapon firing, and spotting. It is classified by system or by method of directing.

**weapon navigation error (WNE).** Relative to GPS and precision-guided munitions, the difference between the measured weapon location and its true location with respect to the Earth.



**weaponneering.** The process of determining the quantity of a specific type of lethal or nonlethal weapon required to achieve a specific level of damage to a given target, considering target vulnerability, weapon effect, munitions delivery accuracy, damage criteria, PFC, and weapon reliability.

**weapons posture (WP).** A method to configure gun/launcher, weapons direction systems/fire control, command-and-decision systems, ordnance, and weapons release authority into three broad categories designed to provide common configuration baselines to reduce the possibility of unintended or accidental weapons release and launch. WPs impose mechanical, electrical, and doctrinal safeguards to prevent weapon release unless authorized by competent authority; heighten awareness of combat systems personnel to the possibility of inadvertent weapon launches; and provide operational commanders a means to direct weapon systems readiness of the forces they command by assigning the appropriate WP for each weapon system for the tactical situation.

**white noise.** Random, incoherent electrical, electronic or acoustic background energy.

**zero time.** 1. In executing an antisubmarine search, the time that the center of the search line passes through the datum. 2. The time a zigzag plan commences, always on the hour. The formation can begin execution at any time but will steer the course shown on the plan for that particular time relative to zero time.

**zigzag.** In ASW, straight-line variations from the base course performed in accordance with a set plan.

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## CHAPTER 3

# Abbreviations and Acronyms

<b>3M</b>	maintenance and material management system
<b>A/A</b>	air-to-air
<b>A/C</b>	aircraft
<b>A/G</b>	air-to-ground
<b>A/J</b>	antijam
<b>A/N</b>	alphanumeric
<b>A/P</b>	automatic pilot
<b>A/S</b>	airspeed/air-to-surface
<b>AA</b>	acoustic advantage; acoustic analysis; antiair; antiaircraft
<b>AA&amp;E</b>	arms, ammunition, and explosives
<b>AAA</b>	antiaircraft artillery; arrival and assembly area; assign alternate area; advance acoustic analyst
<b>AAAV</b>	advanced amphibious assault vehicle
<b>AABFS</b>	amphibious assault bulk fuel system
<b>AABWS</b>	amphibious assault bulk water system
<b>AADC</b>	area air defense commander
<b>AADS</b>	amphibious assault direction system
<b>AAFS</b>	amphibious assault fuel system
<b>AAFST</b>	amphibious assault fuel supply facility
<b>AAI</b>	air-to-air integration; air-to-air interrogator
<b>AAM</b>	air-to-air missile
<b>AAMDC</b>	area air and missile defense commander
<b>AAR</b>	aircraft accident report; air-to-air refueling; after action report; after action review

<b>AASP</b>	arrival and assembly support party
<b>AATC</b>	amphibious air traffic control
<b>AAV</b>	amphibious assault vehicle
<b>AAVP</b>	assault amphibious vehicle, personnel
<b>AAW</b>	antiair warfare (NATO)
<b>AAW(C)</b>	antiair warfare coordination (net) (NATO)
<b>AAW(R)</b>	antiair warfare reporting (net) (NATO)
<b>AAWC</b>	antiair warfare commander (net) (NATO)
<b>ABDR</b>	aircraft battle damage repair
<b>ABF</b>	advance beam forming; advanced beam former
<b>ABFC</b>	advanced base functional component
<b>ABFS</b>	amphibious bulk fuel system
<b>ABL</b>	acquisition before launch/acquire before launch; armored box launcher
<b>ABLTS</b>	amphibious bulk liquid transfer system
<b>ABM</b>	antiballistic missile
<b>ABO</b>	assistant boarding officer
<b>ABT</b>	automatic bus transfer
<b>AC</b>	air conditioning; air controller; air corridor; airspace controller; antichaff (mode); attack control; automatic correlation
<b>ACA</b>	airspace control authority; airlift clearance authority; appropriate command authority; air control authority
<b>ACAL</b>	acoustic calibration; altitude calibration
<b>ACB</b>	amphibious construction battalion
<b>ACCM</b>	acoustic counter-countermeasures
<b>ACCON</b>	acoustic control
<b>ACCS</b>	advanced communications control system; automated command and control system
<b>ACDS</b>	advanced combat direction system
<b>ACE</b>	airborne command element; air combat element; aviation combat element

<b>ACF</b>	alternate command facility; air contingency force; automatic contact follower/following
<b>ACFT</b>	aircraft
<b>ACG</b>	amphibious command group; automatic continuous gridlock
<b>ACHOBS</b>	assistant chief observer
<b>ACIC</b>	airborne combat information center; advanced control indicator set
<b>ACINT</b>	acoustic intelligence
<b>ACLS</b>	automatic carrier landing system
<b>ACM</b>	acoustic countermeasures; air combat maneuvering; annual corrective maintenance
<b>ACN</b>	advance change notice; air control net
<b>ACO</b>	acoustic console operator; acquisition control order; action cut out; administrative contracting officer; air contact officer; air control officer; air control order; airspace control officer; airspace control order
<b>ACOMMS</b>	acoustic communications
<b>ACP</b>	air control point; aircraft communications procedures; airspace control plan; allied communication publication; armament control panel; assign common pool; audio converter processor; auto correlation processor
<b>ACPA</b>	adaptive controlled phased array
<b>ACQ</b>	acquire; acquisition; acquisition radar
<b>ACR</b>	auxiliary control relay
<b>ACS</b>	AEGIS combat system; afloat correlation system; amphibious command ship; automatic channel select; automatic control system; auxiliary crane ship
<b>ACSM</b>	acoustic warfare support measures
<b>ACTS</b>	AEGIS combat training system
<b>ACU</b>	antenna control unit; automatic control unit; auxiliary control unit; air control unit; administrative control unit; aircraft control unit
<b>ACV</b>	air cushion vehicle
<b>ACWS</b>	aircraft control and warning system
<b>AD</b>	actual depth; aided detect/detection; air defense; airspace deconfliction; area defense; attack director; automatic detect; automatic detection; destroyer tender
<b>AD C&amp;R</b>	air defense coordination and reporting (net)
<b>AD/T</b>	air detector/tracker

<b>ADA</b>	air defense alert; auxiliary data area; air defense artillery
<b>ADAFCO</b>	air defense artillery fire control officer
<b>ADAR</b>	AEGIS data reduction
<b>ADB</b>	acoustic distribution box; aircraft discrepancy book
<b>ADC</b>	air detection controller; acoustic decoy cartridge; acoustic device countermeasure; air defense commander
<b>ADCAP</b>	advanced capability
<b>ADCC</b>	air defense command center; air defense control center
<b>ADCP</b>	adaptive detection and correlation program
<b>ADCS</b>	air data computer set
<b>ADD</b>	acoustic deception device; air defense district
<b>ADDS</b>	air deployment delivery system; automated digital data system
<b>ADE</b>	aerial delivery equipment; air defense element; aircraft data entry; automatic data entry
<b>ADF</b>	automatic direction finder
<b>ADG</b>	AEGIS display group
<b>ADGE</b>	air defense ground environment
<b>ADI</b>	altitude-direction indicator; air defense initiative; analog display indicator
<b>ADIZ</b>	air defense identification zone
<b>ADL</b>	advanced data link; airborne data link; armament data line
<b>ADLL</b>	angle deck launch line
<b>ADLM</b>	air delivery land mine
<b>ADM</b>	acoustic database manager; advanced development model; atomic demolition muni- tion; automatic detection mark
<b>ADMG</b>	air defense machine gun
<b>ADNS</b>	automated digital network system
<b>ADOA</b>	air defense operations area
<b>ADP</b>	acoustic data processor; air defense plan; automatic data processing; autopilot data processor
<b>ADS</b>	active dipping sonar; advanced deep-dive system; advanced deployable system;



	AEGIS display system; aerial delivery system; air(space) deconfliction system; aircraft decontamination station; air defense ship; air defense system
<b>ADSI</b>	air defense system integration; air defense systems integrator
<b>ADSS</b>	area defense system suppression
<b>ADT</b>	air data terminal; automated detection and tracking; automatic detection and tracking
<b>ADTS</b>	automated detection and tracking system
<b>ADU</b>	air defense unit; above-deck unit; auxiliary display unit; airborne data unit
<b>ADZ</b>	amphibious defense zone
<b>ADZC</b>	air defense zone coordinator; amphibious defense zone coordinator
<b>AE</b>	ammunition ship; acoustic emission; active emission; assault echelon; assumed enemy; auxiliary exhaust steam
<b>AEA</b>	active electronic attack
<b>AEB</b>	active electronic buoy; emergency breathing air
<b>AED</b>	active electronic decoy; electronic dry air
<b>AEF</b>	active emitter file
<b>AEL</b>	airborne exposure limit; allowance equipage list
<b>AEM</b>	adaptive energy management; autonomous evasion maneuver
<b>AEP</b>	automated environment prediction
<b>AERP</b>	acoustic emissions receiver/processor; active emission receiver processor
<b>AEW</b>	airborne early warning
<b>AEW/C</b>	airborne early warning/control
<b>AEWCU</b>	airborne early warning control unit
<b>AF</b>	audio frequency; augmentation force; store ship
<b>AFB</b>	airframes bulletin
<b>AFC</b>	airframe change; area frequency coordinator; assault force commander; automatic frequency control
<b>AFCS</b>	automatic flight control system
<b>AFD</b>	acoustic firing device
<b>AFDB</b>	large auxiliary floating drydock (non self-propelled)

<b>AFDL</b>	small auxiliary floating drydock (non self-propelled)
<b>AFDM</b>	medium auxiliary floating drydock (non self-propelled)
<b>AFDS</b>	amphibious flagship data system
<b>AFL</b>	assault flight leader; assault force leader
<b>AFM</b>	aviation fleet maintenance
<b>AFMA</b>	afloat fleet maintenance activity
<b>AFOG</b>	airfield operation group
<b>AFOM</b>	active figure of merit
<b>AFOS</b>	assault follow-on shipping
<b>AFOTC</b>	alternate force over-the-horizon track coordinator
<b>AFS</b>	combat store ship
<b>AFSK</b>	audio frequency shift keying
<b>AFT</b>	automatic frequency track
<b>AFTS</b>	automated frequency tone shift
<b>AG</b>	general auxiliary ship
<b>AGB</b>	ice breaker
<b>AGC</b>	automatic gain control
<b>AGER</b>	environmental research ship
<b>AGF</b>	miscellaneous command ship
<b>AGI</b>	auxiliary general intelligence; intelligence collection ship
<b>AGM</b>	air-to-ground missile; missile range instrumentation ship; major communications re- lay ship
<b>AGOR</b>	oceanographic research ship
<b>AGPU</b>	aviation ground power unit
<b>AGS</b>	aviation ground support; surveying ship
<b>AGSE</b>	aviation ground support equipment
<b>AH</b>	hospital ship
<b>AHC</b>	attack helicopter commander

<b>AHP</b>	allied hydrographic publication
<b>AI</b>	airborne interceptor; airborne intercept; air interdiction; area of interest; air intelligence; air intelligence (officer); amplitude input; attitude indicator
<b>AIAC</b>	auto initiate-auto confirm
<b>AIC</b>	air intercept control; air intercept controller, airspace information center; airborne interceptor control
<b>AIDS</b>	attitudinal information data system
<b>AIF</b>	automated installation file
<b>AIG</b>	air intelligence group
<b>AIM</b>	air intercept missile
<b>AIMD</b>	aircraft intermediate maintenance department
<b>AINS</b>	astro-inertial navigation system
<b>AIR</b>	air inflatable retarder; aircraft inventory record; acoustic intercept receiver
<b>AIR TACMAN</b>	aircraft tactical manual
<b>AIRBOC</b>	airborne rapid bloom offboard countermeasure
<b>AIRDET</b>	air detachment
<b>AIREM</b>	air effectiveness measurement
<b>AIROPAUTH</b>	air operating authority
<b>AIROPS</b>	air operations
<b>AIS</b>	acoustic intercept systems; alternate interim successor; automated information system
<b>AIZ</b>	air intercept zone
<b>AJ</b>	auto-jam(ming)
<b>AK</b>	cargo ship
<b>AKR</b>	vehicle cargo ship
<b>ALC</b>	automatic level control; automatic light control; air logistics coordinator
<b>ALCM</b>	air-launched cruise missile
<b>ALD</b>	aviation logistics division; available-to-load date; annotated local display
<b>ALDV</b>	air-launched decoy vehicle

<b>ALM</b>	air-launched missile system
<b>ALMS</b>	air-launched missile system
<b>ALNOT</b>	alert notice
<b>ALO</b>	air liaison officer
<b>ALP</b>	air-launched platform; allied logistics publication
<b>ALS</b>	automatic landing system; all-weather landing subsystem; ambient-limited speed
<b>ALSS</b>	advanced logistic support site
<b>ALT</b>	alteration; alternate; altimeter
<b>ALTCOM</b>	alternate command/commander
<b>ALTCOMCEN</b>	alternate command center
<b>ALTCP</b>	alternate command post
<b>ALTHQ</b>	alternate headquarters
<b>ALWT</b>	advanced lightweight torpedo
<b>ALZ</b>	assault landing zone
<b>AM</b>	acoustic module; acoustic monitoring; amplitude modulation; alternate mode; array monitoring
<b>AMAC</b>	armament monitor and control
<b>AMC</b>	airborne mission commander; austere maritime capability
<b>AMCC</b>	ashore mobile contingency communications
<b>AMCCS</b>	Marine air command and control system; Advanced Modular Command and Control System
<b>AMCIT</b>	American citizen
<b>AMCM</b>	airborne mine countermeasures
<b>AMD</b>	activity manning document; activity manpower document
<b>AMDAS</b>	airborne mine detection and surveillance
<b>AMG</b>	antenna mast group
<b>AMHS</b>	automated message-handling system
<b>AMIO</b>	alien migrant interdiction operations
<b>AMO</b>	aircraft maintenance officer

<b>AMR</b>	aircraft mishap report; associated measurement report; auxiliary machinery room
<b>AMRAAM</b>	advanced medium-range air-to-air missile
<b>AMRS</b>	automated merchant ship reporting system
<b>AMS</b>	alteration management system
<b>AMSL</b>	above mean sea level
<b>AMTRAC</b>	amphibious tractor
<b>AMVER</b>	automated mutual assistance vessel rescue
<b>AMW</b>	amphibious warfare
<b>ANAPROP</b>	anomalous propagation
<b>ANC</b>	afloat net control
<b>ANDVT</b>	analog narrow band digital voice terminal
<b>ANGLICO</b>	air/naval gunfire liaison company
<b>ANL</b>	automatic noise limiting; net laying ship
<b>ANM</b>	ambient noise measurement; acoustic noise maker/making
<b>ANS</b>	automatic navigation system
<b>ANT</b>	antenna
<b>ANTOPS</b>	Antarctic operations
<b>AO</b>	air officer; approach officer; area of operations; action officer; aerial observer; oiler
<b>AOA</b>	amphibious objective area; angle of arrival; angle of attack
<b>AOB</b>	advanced operations base; air order of battle; angle of bank; angle on the bow; aviation operations branch
<b>AOBT</b>	acoustic onboard trainer; acoustic on-board training
<b>AOC</b>	air operations center; area operational commander; automatic overload control
<b>AOE</b>	angle of endfire; fast combat support ship
<b>AOG</b>	air operations group; gasoline tanker; airfield operation group
<b>AOI</b>	area of interest
<b>AOJ</b>	acquisition on jam
<b>AOP</b>	air operations plan; airborne observation post; airborne operational program; area of probability; average output power; avionics operational program

<b>AOR</b>	area of responsibility; replenishment oiler
<b>AOSD</b>	APS operations support detachment
<b>AOU</b>	area of uncertainty
<b>AP</b>	advance party; aim point; allocatable processor; anomalous propagation; armor piercing; attack position; average power; personnel transport
<b>APA</b>	air patrol area
<b>APB</b>	self-propelled barracks ship
<b>APC</b>	area of positive control; armored personnel carrier
<b>APEL</b>	allied publication electronic library
<b>APET</b>	acoustic passive elevation tracker
<b>APF</b>	afloat prepositioning force
<b>APG</b>	aimpoint graphic
<b>APL</b>	arracks craft (non self-propelled); allowance parts list
<b>APM</b>	acoustic protective measures
<b>APO</b>	afloat prepositioning operations
<b>APOD/SPOD</b>	aerial port of debarkation/seaport of debarkation
<b>APOE</b>	aerial port of embarkation
<b>APP</b>	acoustic performance prediction; Allied Procedures Publication; auxiliary power plant
<b>APR</b>	acoustic passive ranging; air-purifying respirator
<b>APS</b>	acoustic prediction system; adaptive processor sonar; adaptive processor system; advanced planning system; afloat planning system (TLAM); allocation processor; automated planning system; afloat prepositioning ship
<b>APT</b>	all-purpose tracker; armor piercing tracer; advanced phase training; automatic picture transmission
<b>APU</b>	auxiliary printer unit; auxiliary propulsion unit; auxiliary power unit
<b>APZ</b>	ASW patrol zone
<b>AR</b>	aerial refueling; antiradar; antiradiation; armor; artillery rocket; aircraft rocket; armed reconnaissance; automatic rifle; repair ship
<b>ARA</b>	assigned responsible agency
<b>ARC</b>	air reporting control; airborne radio control; cable repairing ship



<b>ARCOPS</b>	Arctic operations
<b>ARCT</b>	air refueling control time
<b>ARD</b>	auxiliary repair drydock (non self-propelled)
<b>ARDF</b>	airborne radio direction finding
<b>ARDM</b>	medium auxiliary repair drydock (non self-propelled)
<b>AREC</b>	air resource element coordinator
<b>ARF</b>	amphibious ready force
<b>ARFF</b>	aircraft rescue and fire fighting
<b>ARG</b>	accident response group; amphibious ready group
<b>ARI</b>	azimuth and range indicator
<b>ARIP</b>	air refueling initial point
<b>ARL</b>	airborne reconnaissance low; aspect ratio limiting; assault rocket launcher
<b>ARM</b>	antiradar (or radiation) missile
<b>ARMCT</b>	area religious ministry coordination team
<b>ARO</b>	aerial reconnaissance officer; auxiliary readout display
<b>ARP</b>	airborne reconnaissance platform; airborne relay platform
<b>ARPR</b>	automatic radar pattern recognition
<b>ARR</b>	allowance requirements register; analysis receiver ready; antenna rotation rate
<b>ARS</b>	acute radiation syndrome; air refueling store; auto ready spare; automatic receive system; assault rocket launcher; salvage ship
<b>ART</b>	amphibious reconnaissance team
<b>ARTC</b>	auto remote track correlation
<b>ARTIS</b>	advanced radar target identification system
<b>ARU</b>	amphibious reconnaissance unit
<b>A-RVM</b>	air-dropped rising vertical mine
<b>ARWS</b>	antiradiation weapon system
<b>AS</b>	associated support; submarine tender; acoustic supervisor; antispoof (GPS); automatic sprinkler; auxiliary steam aviation section

<b>ASA</b>	accelerated standalone; analog signature analysis; auxiliary spectral analysis; auxiliary spectrum analyzer
<b>ASAC</b>	antisubmarine air controller
<b>ASAG</b>	air-surface action group
<b>ASAR</b>	advanced synthetic aperture radar; air search acquisition radar
<b>ASAT</b>	air search attack team; antisatellite
<b>ASAU</b>	air search attack unit
<b>ASB</b>	advanced support base; air situational broadcast
<b>ASC</b>	acoustic support console; air support control; air support coordinator
<b>ASCM</b>	all-source contact management; antiship cruise missile
<b>ASD</b>	air support director; arm and safe device
<b>ASDS</b>	advanced sea-air-land (SEAL) delivery system; air situation display system
<b>ASE</b>	aircraft survivability equipment; air support element; aviation support equipment
<b>ASF</b>	augmentation security force
<b>ASI</b>	aircraft sensor input; automated shore interface
<b>ASIP</b>	all-source imagery processor
<b>ASK</b>	acoustic suppression kit; amplitude shift keying
<b>ASL</b>	above sea level; allowable supply list; archipelagic sea lane
<b>ASM</b>	air-to-surface missile; antiship missile; attack sea mine
<b>ASMB</b>	aviation support management branch
<b>ASMD</b>	antiship missile defense
<b>ASO</b>	acoustic sensor operator; aviation safety officer
<b>ASP</b>	advanced signal processor/processing; ammunition supply point; antenna scan period
<b>ASPB</b>	assault support patrol boat
<b>ASPECT</b>	active system performance estimate computer tool
<b>ASPJ</b>	airborne self-protection jammer
<b>ASR</b>	air surveillance radar; assault support request; automatic send/receive; submarine rescue ship; airborne search & reconnaissance; airborne search radar; airport surveillance radar; armed surface reconnaissance

<b>ASRAPs</b>	acoustic sensor range prediction system
<b>ASROC</b>	antisubmarine rocket
<b>ASRP</b>	AEGIS ship reference point
<b>ASSG</b>	acoustic sensor signal generator
<b>ASST</b>	antisurface ship surveillance and targeting
<b>AST</b>	accelerated service test
<b>ASTAB</b>	automatic status board
<b>ASTD</b>	antiship torpedo defense
<b>ASU</b>	acoustic sensor unit
<b>ASUWC</b>	antisurface warfare commander (NATO)
<b>ASW</b>	antisubmarine warfare
<b>ASWACS</b>	antisubmarine warfare air control ship
<b>ASWC</b>	antisubmarine warfare commander; antisubmarine warfare centers
<b>ASWCCCS</b>	antisubmarine warfare centers command control system
<b>ASWEPS</b>	antisubmarine warfare environmental prediction system
<b>ASWFA</b>	antisubmarine warfare free area
<b>ASWFCO</b>	antisubmarine warfare fire control officer
<b>ASWO</b>	antisubmarine warfare officer
<b>ASWOC</b>	antisubmarine warfare operations center; antisubmarine warfare operations console
<b>ASWS</b>	antisubmarine warfare system; advanced strike weapons system
<b>ASWTDS</b>	antisubmarine warfare tactical data system
<b>ASWTN</b>	antisubmarine warfare track number
<b>AT</b>	acceptance trials; airtight; antitank; avionics technician
<b>ATA</b>	actual time of arrival; airport traffic area; automatic threat alert; automatic track association; auxiliary ocean tug
<b>ATAC</b>	air-transportable acoustic communication; airborne tactical air coordinator; advanced traceability and control; Navy antiterrorist alert center
<b>ATACC</b>	advanced tactical air command center
<b>ATACO</b>	air tactical control officer

<b>ATACS</b>	amphibious tactical air control system
<b>ATAR</b>	antitank aircraft rocket
<b>ATC</b>	air test cap; air track coordinator; air traffic control; air transportable clinic
<b>ATCO</b>	air traffic control officer
<b>ATCU</b>	air transportable communications unit
<b>ATD</b>	actual time of departure; advanced technology demonstration; advanced torpedo decoy; automatic target detection; active track display; automatic target detector
<b>ATDC</b>	airborne tactical data control
<b>ATDS</b>	automatic target detection system; airborne tactical data system
<b>ATE</b>	active track evaluation; airborne terminal equipment; automatic test equipment
<b>ATF</b>	automatic tracking feature; automatic target following; fleet ocean tug; amphibious task force
<b>ATG</b>	afloat training group; amphibious task group; antenna transceiver group
<b>ATH</b>	above the horizon
<b>ATI</b>	active transition indicator; ambient temperature illuminator
<b>ATIS</b>	automatic terminal information service
<b>ATL</b>	assault team leader
<b>ATM</b>	air tasking message; air tracker mode; array termination module; asynchronous transfer mode; automated track management; automatic target management
<b>ATO</b>	antiterrorism officer; air tasking order; airborne tactical officer; assisted takeoff (system)
<b>ATOC</b>	air terminal operations center
<b>ATOD</b>	automatic time of day
<b>ATOI</b>	air target of interest
<b>ATON</b>	aids to navigation
<b>ATOX</b>	ATO express
<b>ATP</b>	Allied Tactical Publication; advanced tracking prototype
<b>ATR</b>	ammunition transaction report
<b>ATS</b>	acoustic tracking station; acoustic track(ing) supervisor; air traffic service; air traffic supervisor; ammunition tracking system; advanced tactical surveillance; salvage and rescue ship

<b>ATSB</b>	advanced tactical support base
<b>ATSG</b>	acoustic test signal generator
<b>ATV</b>	all-terrain vehicle
<b>AUM</b>	air-to-underwater missile
<b>AUR</b>	all-up round
<b>AUTOCAT</b>	automatic communication airborne transfer
<b>AUTODIN</b>	automatic digital network
<b>AUTOSEVOCOM</b>	automatic secure voice communications
<b>AUX</b>	auxiliary
<b>AV</b>	aviation
<b>AVB</b>	aviation logistic support ship
<b>AVCAL</b>	aviation consolidated allowance list
<b>AVDLR</b>	aviation depot-level repairable
<b>AVLB</b>	armored vehicle-launched bridge
<b>AVM</b>	auxiliary guided missile ship
<b>AVMRL</b>	armored vehicle-mounted rocket launcher
<b>AVNL</b>	automatic video noise limiting
<b>AVSDU</b>	analog-video signal display unit
<b>AVT</b>	automatic video tracking
<b>AW</b>	acoustic warfare; air warfare
<b>AW (C) (net)</b>	air warfare coordination
<b>AW (R) (net)</b>	air warfare reporting
<b>AWACS</b>	airborne warning and control system
<b>AWC</b>	air warfare commander
<b>AWCAS</b>	all weather close air support
<b>AWCCM</b>	acoustic warfare counter-countermeasures
<b>AWCLS</b>	all-weather carrier landing system
<b>AWCM</b>	acoustic warfare countermeasures

<b>AWR</b>	automated work request
<b>AWS</b>	Amphibious Warfare School; AEGIS weapon system; air warfare section; air weather service; analysis workstation
<b>AWSM</b>	acoustic warfare support measures
<b>AWTT</b>	above water thrown torpedo; above water torpedo tub
<b>AXBT</b>	airborne expendable bathythermograph
<b>AXP</b>	Allied Exercise Publication; ambulance exchange point
<b>B&amp;T</b>	ballast and trim
<b>B/B</b>	break bulk; bridge-to-bridge
<b>B/N</b>	bombardier/navigator
<b>B/U</b>	backup
<b>BA</b>	beam amplitude; bleed air; bridge demolition, abutment (abbreviation used on an engineer obstacle overlay); relative target bearing
<b>BACS</b>	back analog communications switch
<b>BADGE</b>	basic air defense ground environment
<b>BAI</b>	battlefield air interdiction; bottom area of interest
<b>BAM</b>	binary angular measure
<b>BAP</b>	ballistic aimpoint
<b>BAR</b>	barrier
<b>BAR ALT</b>	barometric altitude
<b>BARB</b>	beacon-aided radar bombing
<b>BARC</b>	barge, amphibious, resupply cargo
<b>BARCAP</b>	barrier combat air patrol
<b>BARJAM</b>	barrage jammer
<b>BARO</b>	barometric
<b>BAROPS</b>	barrier operations
<b>BASS</b>	battlefield area surveillance system
<b>BB</b>	battleship; bottom bounce; broadband; breakbulk
<b>BBC</b>	beam-to-beam correlation

<b>BBCM</b>	broadband countermeasure
<b>BBL</b>	barrel (42 U.S. gallons)
<b>BBR</b>	bottom bounce range
<b>BBS</b>	baseband switch; bulletin board system; buoyancy subsystem
<b>BBU</b>	battery backup unit
<b>BC</b>	battle captain; biological/chemical
<b>BCA</b>	broadcast control authority; buoyant cable antenna
<b>BCC</b>	budget classification code
<b>BCD</b>	battlefield coordination detachment; binary coded decimal
<b>BCM</b>	beyond capability of maintenance
<b>BCP</b>	ballast control panel; battery command post
<b>BCR</b>	baseline change request
<b>BCS</b>	broadcast control station
<b>BCSN</b>	broadcast sequence number
<b>BCST</b>	broadcast
<b>BCU</b>	beach clearance unit
<b>BD</b>	band; base detonating; best depth
<b>BDA</b>	battle damage assessment
<b>BDF</b>	base defense force; base detonating fuze
<b>BDHI</b>	bearing-distance-heading indicator
<b>BDI</b>	battle damage indications; bearing deviation indicator
<b>BDS</b>	battle dressing station; bomb director system/set
<b>BDU</b>	battle dress uniform; battle dress utility; below-deck unit; bomb dummy unit; basic display unit
<b>BE</b>	battlefield environment; bearing error
<b>BEACO</b>	brief encounter acoustic collection opportunity
<b>BESEP</b>	basic electronics system engineering plan
<b>BEZ</b>	beach exit zone



<b>BF</b>	base frequency; bulk fuel
<b>BF/BGC</b>	battle force/battle group cellular
<b>BFI</b>	bearing frequency indicator
<b>BFIMA</b>	battle force intermediate maintenance activity
<b>BFL</b>	bomb fall line
<b>BFLC</b>	battle force logistics coordinator
<b>BFM</b>	basic fighter maneuvers
<b>BFO</b>	beat frequency oscillation; beat frequency oscillator
<b>BFRL</b>	base facilities requirements list
<b>BG/TF</b>	battle group/task force
<b>BG/TG CMD</b>	battle group/task group command
<b>BGC</b>	battle group commander; boat group commander
<b>BG CMD</b>	battle group command
<b>BGCTT</b>	battle group commander tactical training
<b>BGDBM</b>	battle group database management; battle group database manager
<b>BGLC</b>	battle group logistics coordinator
<b>BGML</b>	battle group mission library
<b>BGPHERS</b>	battle group passive horizon extension system
<b>BHA</b>	bomb hit assessment
<b>BI</b>	beacon interrogator; bearing interrogation
<b>BIAS</b>	buoyant integrated antenna system
<b>BICEPS</b>	brevity, immediacy, centrality, expectancy, proximity, and simplicity
<b>BIDS</b>	bridge information display system
<b>BIMP</b>	ballistic impact point
<b>BIS</b>	bottom imaging sonar
<b>BISS</b>	base and installation security program
<b>BIT</b>	beam interpolation tracker; built-in test
<b>BITE</b>	built-in test equipment

<b>BITS</b>	built-in test system
<b>BIU</b>	beach interface unit; buoy interface unit
<b>BIW</b>	basic infantry weapon
<b>BKGD</b>	background
<b>BKLKTNG</b>	break-lock EA training
<b>BKS</b>	broadcast keying station
<b>BL</b>	band level; baseline length; bottom loss; bracketing ladder; broadcast list
<b>BL&amp;P</b>	blind-loaded and plugged (projectile)
<b>BLC</b>	boundary layer control
<b>BLG</b>	below-layer gradient
<b>BLK</b>	block
<b>BLOS</b>	beyond line of sight
<b>BLP</b>	bottom leaded plastic
<b>BLR</b>	below layer range; blower; boiler
<b>BLS</b>	beach landing site
<b>BLT</b>	battalion landing term
<b>BLUG</b>	bottom loss upgrade
<b>BM</b>	battle management; beachmaster
<b>BMD</b>	buried mine detector
<b>B-MI</b>	bottom minelike object
<b>BN</b>	barrage noise
<b>BNL</b>	background noise level
<b>BO</b>	bearing only; boarding officer
<b>BOA</b>	broad ocean area; beach operating area
<b>BOC</b>	battery operations center
<b>BOG</b>	beach operations group
<b>B-OI</b>	bottom object on interest
<b>BOL</b>	bearing-only launch

<b>BOM</b>	bit-oriented message; by other means; bill of materials
<b>BOSG</b>	base operations support group
<b>BOT</b>	beginning of tape
<b>BP</b>	ballistic processor; bearing profile; bandpass
<b>BPD</b>	basic point defense; beach party division
<b>BPH</b>	barrels per hour
<b>bps</b>	bits per second
<b>BPS</b>	break point speed
<b>BPSK</b>	binary phase shift keying
<b>BPT</b>	beach party team
<b>BR</b>	bearing and range; bearing rider; blade rate
<b>BRAA</b>	bearing, range, altitude, and aspect
<b>BRC</b>	base recovery course
<b>BRD</b>	bearing and range difference; best receiver depth
<b>BRI</b>	bearing range indicator; bearing rate image
<b>BRIGAND</b>	bistatic radar intelligence generation and analysis system
<b>BRL</b>	bomb release line
<b>BRM</b>	bottom reference mode
<b>BRP</b>	ballistic release point; beam interpolation tracker remote readout
<b>BRS</b>	broadcast radiating station
<b>BS</b>	bottom sounding or bottom-surface (propagation path); bottom-surface; briefing support; bystatic sonar
<b>BSA</b>	beach support area; brigade support area; body surface area; bow/stern algorithm
<b>BSS</b>	bottom sounding secure; buoyancy subsystem
<b>BSU</b>	blood support unit; bomb stabilization unit
<b>BT</b>	boarding team; break transmission; bathythermal; bathythermograph; burnthrough; builder's trail
<b>BTA</b>	beep trim actuator
<b>BTB</b>	bridge-to-bridge

<b>BTH</b>	bearing time history
<b>BTM</b>	boarding team member
<b>BTP</b>	bearing track program
<b>BTR</b>	bearing time recorder
<b>BTRY</b>	battery
<b>BTU</b>	beach termination unit
<b>BU</b>	backup; builder
<b>BUDS</b>	basic underwater SEAL (sea-air-land) (training)
<b>BULK</b>	bulk cargo
<b>BUNO</b>	bureau number
<b>BVP</b>	beacon video processor
<b>BVR</b>	beyond visual range
<b>BW</b>	bandwidth; bearing window; biological warfare; beamwidth
<b>BWC</b>	bandwidth correction; battle watch captain; boat wave commander
<b>BWT</b>	basic warrior training
<b>BZ</b>	beach zone
<b>C and D</b>	cover and deception
<b>C&amp;DS</b>	command and decision system
<b>C&amp;I</b>	communications and information
<b>C&amp;R</b>	coordination and reporting
<b>C&amp;R net</b>	coordination and reporting network
<b>C/B</b>	chemical/biological
<b>C/C</b>	change in course
<b>C/D</b>	change in depth
<b>C/S</b>	call sign; change in speed
<b>C/V</b>	criticality/vulnerability; cushion vanes
<b>C2</b>	command and control
<b>C2W C&amp;R</b>	command and control warfare coordination and reporting (net)

<b>C3</b>	command, control, and communications
<b>C3CM</b>	command, control, and communications countermeasures
<b>C3I</b>	command, control, communications, and intelligence
<b>C4</b>	command, control, communications, and computers
<b>C4I</b>	command, control, communications, computers, and intelligence
<b>C4ISR</b>	command, control, communications, computers, intelligence, surveillance, and reconnaissance
<b>CA</b>	civil administration; civil affairs; combat assessment; coordinating altitude
<b>CAA</b>	coordinating authority for air
<b>CAB</b>	combat advisory broadcast; combined A-scan/B-scan
<b>CABE</b>	computer-assisted bearing estimate
<b>CAC</b>	combined arms center (U.S.A.); control air; computer-aided classification; continuous aim correction
<b>CACC</b>	commander, air component command
<b>CAD</b>	catapult steam drain; collective address designator; computer automated design; computer-aided detection; cartridge-actuated device
<b>CADA</b>	computer-assisted distribution and assignment
<b>CADC</b>	central air data computer
<b>CADJ</b>	counter angle deception jammer
<b>CADOB</b>	consolidated air defense order of battle
<b>CAFI</b>	computer-aided fault isolation
<b>CAFSU</b>	carrier and field service unit
<b>CAG</b>	carrier air wing commander; civil affairs group; collective address group
<b>CAI</b>	cooperative aircraft identification
<b>CAIC</b>	corps airspace information center
<b>CAIMS</b>	conventional ammunition integrated management system
<b>CAINS</b>	carrier aircraft inertial navigation system
<b>CAL</b>	confined area landing
<b>CALCM</b>	conventional air-launched cruise missile

<b>CALM</b>	computer-aided load manifesting
<b>CAP</b>	combat air patrol; computer access panel; crisis action planning
<b>CAPC</b>	carrier aircraft plane commander
<b>CAPCU</b>	combat air patrol control unit
<b>CAPS</b>	channel access protocols; combat airdrop planning software; commander's analysis and planning system; consolidated aerial port system
<b>CAPTOR</b>	encapsulated torpedo mine (mine Mk 60)
<b>CARG</b>	commander, amphibious ready group
<b>CARP</b>	computer and radar processor
<b>CARQUALS</b>	carrier qualifications
<b>CART</b>	cargo afloat rig team; consolidated ASW readiness test; controlled alert response terminal; command assessment of readiness and training
<b>CAS</b>	calibrated airspeed; casualty; close air support; collaboration at sea; combined antenna system; computer-aided search
<b>CAS/STIR</b>	combined antenna system/separate track illuminating radar
<b>CASCON</b>	close air support control
<b>CASP</b>	computer assisted search planning (system)
<b>CASREP</b>	casualty report
<b>CASS</b>	command-activated sonobuoy system; comprehensive acoustic simulation system; consolidated automated support system
<b>CAT</b>	catapult; clear air turbulence; combined acceptance trials (ships); communications assist team; container anchorage terminal; command action team
<b>CATCC</b>	carrier air traffic control center
<b>CATF</b>	commander, amphibious task force
<b>CATM</b>	coordinated air tasking message; combined air tasking message
<b>CAX</b>	combined arms exercise
<b>CB</b>	chemical/biological; circuit breaker; construction battalion (SEABEES); counterbattery
<b>CBC</b>	construction battalion center
<b>CBDR</b>	constant bearing, decreasing range
<b>CBIL</b>	common bulk item list



<b>CBLUG</b>	consolidated bottom-loss upgrade
<b>CBM</b>	condition-based maintenance; cruise ballistic missile
<b>CBMU</b>	construction battalion maintenance unit
<b>CBR</b>	chemical, biological, and radiological
<b>CBRD</b>	chemical, biological, and radiological defense
<b>CBRN</b>	Caribbean Basin Radar Network; chemical, biological, radiological, or nuclear
<b>CBRT</b>	chemical-biological response team
<b>CBT</b>	continuous boat track; computer-based training
<b>CBU</b>	cluster bomb unit; conference bridge unit; construction battalion unit; color burst unit
<b>CBW</b>	chemical and biological warfare
<b>CC</b>	contact coordinator; contributing command; control console; crew chief; crosscorrelate(d)
<b>CCA</b>	carrier-controlled approach; carrier control area; circuit card assembly; contamination control area; craft collection area; LCAC control area
<b>CCAS</b>	combat control and acoustic system
<b>CCC</b>	command and control center; command, control, and communications; communications center computer; computer complex casualty; critical control circuit
<b>CCD</b>	camouflage, concealment, and deception
<b>CC-DTD</b>	common conventional DTD
<b>CCG</b>	Cartesian coordinate grid; commander, carrier group; combat communications group; computer control group
<b>CCIP</b>	continuously computed impact point
<b>CCIR</b>	commander's critical information requirements
<b>CCJTF</b>	commander, combined joint task force
<b>CCM</b>	communications countermeasures; cooperative countermeasures; counter-countermeasures
<b>CCO</b>	ceiling cutout; central control officer; circuit control officer; combat cargo officer
<b>CCOI</b>	critical contact of interest
<b>CCP</b>	combined command post; casualty collection point; casualty control panel; consolidation/containerization point; consolidated cryptologic program; converter control processor; countermeasure control panel; craft control point; cushion (LCAC) control point

<b>CCR</b>	closed circuit refueling
<b>CCRS</b>	combat craft retrieval system
<b>CCS</b>	central control station; constellation control station; constrained course and speed; control and communication subsystem; cockpit control system; combat control system; command and control system
<b>CCSP</b>	common contingency support package; combat cryptologic support console
<b>CCSS</b>	combat cryptologic support system
<b>CCTV</b>	closed circuit television
<b>CCU</b>	cockpit control unit; common control unit
<b>CCW</b>	counterclockwise
<b>CCWS</b>	common cryptologic workstation; cryptologic combat weapon system
<b>CD</b>	civil defense; collateral damage; chart datum; command display; command destruct; counterdetection; counterdrug; critical depth; compact disk
<b>CDB</b>	central database; common database
<b>CDC</b>	common display console; computer display console; combat direction center
<b>CDCO</b>	combat direction center officer
<b>CDE</b>	central data exchange; chemical defense equipment; common desktop environment
<b>CDF</b>	combat direction finding
<b>CDG</b>	control display generator
<b>CDI</b>	control display indicator; course deviation indicator
<b>CDIP</b>	consolidated defense intelligence program
<b>CDITEG</b>	command digital television generator
<b>CDM</b>	chemical downwind message; configuration data manager
<b>CDP</b>	computer data processor; control display processor; craft departure point; landing craft air cushion (LCAC) departure point; cumulative detection probability; concept development plan
<b>CDPS</b>	communications data processing system
<b>CDR</b>	cargo drop reel; control display repeater; counterdetection range; critical design review
<b>CDS</b>	combat direction system; control display subsystem; command destruct system; conventional dive system

<b>CDU</b>	consolidated diver unit; control display unit; cockpit display unit
<b>CDWS</b>	control and display workstation
<b>CE</b>	circular error; civil engineer; clutter envelope; command element; construction engineer; contact evaluation; cooperative engagement
<b>CEB</b>	combined effects bomblet
<b>CEC</b>	cooperative engagement capability
<b>CED</b>	captured enemy documents; critical event debrief
<b>CEDF</b>	cooperative engagement data file
<b>CEE</b>	captured enemy equipment
<b>CEG</b>	central equipment group
<b>CEI</b>	communications-electronics instruction
<b>CEM</b>	cryptologic electronic countermeasures; combat effectiveness measure
<b>CENTRIXS</b>	combined enterprise regional information exchange system
<b>CEO</b>	central control officer
<b>CEOI</b>	communication and electronic operating instructions
<b>CEP</b>	combat entry point; contact evaluation plot; cooperative engagement processor; circular error probable
<b>CEPN</b>	cooperative engagement processor number
<b>CERT</b>	civil engineer reconnaissance team; computer emergency response team; certification/certified; combined environmental reliability test(ing); crew escape and rescue technique
<b>CERT ID</b>	certified identification
<b>CERTSUB</b>	certain submarine
<b>CESE</b>	civil engineering support equipment
<b>CESM</b>	cryptologic electronic support measures
<b>CFA</b>	cognizant field activity; crossfield amplifier; conformal array
<b>CFAR</b>	constant false alarm rate
<b>CFE</b>	contractor furnished equipment
<b>CFL</b>	coordinated fire line
<b>CFM</b>	CONUS freight management

<b>CFOTC</b>	composite FOTC
<b>CFP</b>	concept formulation plan
<b>CFPS</b>	combat flight planning software
<b>CFR</b>	Code of Federal Regulations; crash, fire, and rescue; cylinder firing rate
<b>CFS</b>	category function switch; command function select; community and family support; continuous full scan; critical failure summary
<b>CG</b>	center of gravity; Coast Guard; commanding general; guided missile cruiser
<b>CG(N)</b>	cruiser, guided missile (nuclear)
<b>CGL</b>	command guard list
<b>CGN</b>	guided missile cruiser (nuclear propulsion)
<b>CGSE</b>	common ground support equipment
<b>CHA</b>	craft handling area
<b>CHAPGRU</b>	cargo handling and port group
<b>CHBDL</b>	common high-bandwidth data link
<b>CHD</b>	cargo handling detachment
<b>CHE</b>	cargo handling equipment; container handling equipment
<b>CHEM</b>	chemical
<b>CHEX</b>	channel expansion
<b>CHF</b>	cargo handling force
<b>CHOBS</b>	chief observer
<b>CHOP</b>	change of operational control; checkout procedure
<b>CHT</b>	collection, holding, and transfer
<b>CI</b>	combat information; combat identification; configuration item; corrected intercept; correlation index; critical information; counterintelligence
<b>CIB</b>	communications information bulletin; controlled image base
<b>CIC</b>	combat information center
<b>CICWO</b>	combat information center watch officer
<b>CID</b>	combat identification; component identification description; critical impulse display; cryptologic interface device

<b>CIDC</b>	combat identification coordinator
<b>CIEA</b>	classification, identification, and engagement area
<b>CIF</b>	command information flow
<b>CIFF</b>	centralized identification, friend or foe
<b>CIG</b>	computer interface group
<b>CIGARS</b>	console internally generated and refreshed symbols
<b>CIJ</b>	close-in jamming
<b>CILS</b>	carrier instrument landing system
<b>CIN</b>	channel identification number; circuit identification number
<b>CINTEX</b>	combined in-port tactical exercise
<b>CIP</b>	coast-in point; critical intelligence parameter(s); class improvement plan; component improvement program
<b>CIRT</b>	computer incident response team
<b>CIS</b>	close-in search; combat identification system; cooperative identification system; communications and information systems
<b>CISM</b>	critical incident stress management
<b>CIT</b>	combined interrogator transponder; counterintelligence team
<b>CIU</b>	computer interface unit; control-indicator unit; converter interface unit
<b>CIV</b>	civilian
<b>CIWS</b>	close-in weapon system
<b>CL</b>	confidence level; centerline
<b>CLASS</b>	classification
<b>CLC</b>	command launch computer
<b>CLCC</b>	contact under close control
<b>CLD</b>	critical low-density
<b>CLD/HD</b>	critical low-density/high demand
<b>CLDS</b>	closed-loop degaussing system
<b>CLEAR</b>	closed-loop evaluation and reporting
<b>CLEARCERT</b>	clear certification

<b>CLF</b>	combat logistics force; commander, landing force; comparative LOFAR fix(ing)
<b>CLRNC</b>	clearance
<b>CLS</b>	capsule launch(ing) system
<b>CLSF</b>	combat logistics support force
<b>CLT</b>	commander, landing team
<b>CLZ</b>	craft landing zone; cushion (LCAC) landing zone
<b>CM</b>	countermeasures
<b>CMA</b>	civil-military affairs; contact motion analysis; corrective maintenance action
<b>CMAS</b>	cruise missile avoidance system
<b>CMAT</b>	consequence-management advisory team
<b>CMC</b>	central mission computer; Commandant of the Marine Corps
<b>CMCA</b>	cruise missile carrier aircraft
<b>CMCC</b>	computer monitor and control console; classified material control center
<b>CMCS</b>	communications monitoring and control system
<b>CMDR</b>	coherent monopulse Doppler radar
<b>CME</b>	countermeasures evaluation
<b>CMGS</b>	cruise missile guidance system
<b>CML</b>	canister missile launcher
<b>CMMD</b>	cruise missile mission designator
<b>CMO</b>	civil-military operations
<b>CMOC</b>	civil-military operations center
<b>CMOS</b>	cargo movement operations system(s); complementary metal-oxide semiconductor
<b>CMOS RAM</b>	complementary metal-oxide semiconductor random access memory
<b>CMP</b>	class maintenance plan; conversion master plan; cruise missile project; communications message processor
<b>CMPF</b>	commander, maritime prepositioning force
<b>CMPM</b>	combat mission planning module
<b>CMPT</b>	consequence management planning team

<b>CMRT</b>	consequence management response team
<b>CMS</b>	communications security material system; condition monitoring system
<b>CMSA</b>	cruise missile support activity
<b>CMSS</b>	collection management support system
<b>CMST-N</b>	collection management support tool – Navy
<b>CMT</b>	cooperative mobile target
<b>CMTU</b>	cartridge magnetic tape unit
<b>CMUX</b>	converter multiplexer
<b>CMWWDS</b>	countermeasures water washdown system
<b>CNA</b>	computer network attack
<b>CNC</b>	central navigation computer
<b>CND</b>	computer network defense
<b>CNDO</b>	computer network defense operations
<b>CNI</b>	communication-navigation-identification
<b>CNO</b>	Chief of Naval Operations; computer network operations
<b>CNOP</b>	counternarcotic operations
<b>CNOR</b>	command not operationally ready
<b>CO</b>	conscientious objection
<b>COA</b>	course of action
<b>COB</b>	chief of the boat; close of business
<b>COBRA</b>	coastal battlefield reconnaissance and analysis
<b>COC</b>	chain of command; current operations center
<b>COCOM</b>	combatant commander
<b>COD</b>	carrier onboard delivery; collect on delivery; combat operations division; correction of deficiency
<b>CODAG</b>	combination diesel and gas
<b>CODAR</b>	correlation detection and recording
<b>CODOG</b>	combination diesel or gas



<b>COE</b>	common operating environment
<b>COEA</b>	cost and effectiveness analysis
<b>COF</b>	cutoff frequency
<b>COG</b>	center of gravity; cognizance symbol
<b>COGAG</b>	combination gas and gas
<b>COGOG</b>	combination gas or gas
<b>COI</b>	contact of interest; critical operational issue
<b>COLEMP</b>	collection emphasis
<b>COLOP</b>	collection opportunity
<b>COLT</b>	combat observation and lasing team
<b>COM</b>	chief of mission; character-oriented message
<b>COMDAC</b>	command, display, and control
<b>COMDT</b>	commandant
<b>COMINT</b>	communications intelligence
<b>COMJAM</b>	communications jamming
<b>COMMCM</b>	communications countermeasures
<b>COMPLAN</b>	communications plan
<b>COMMS</b>	communications
<b>COMMSPOT</b>	communications spot report
<b>COMPASS</b>	computer-alerted surveillance system
<b>COMPTUEX</b>	composite training unit exercise
<b>COMPUSEC</b>	computer security
<b>COMREL</b>	community relations project
<b>COMSAT</b>	communications satellite
<b>COMSEC</b>	communications security
<b>COMSTA</b>	communications station
<b>COMTAC</b>	tactical communications
<b>COMTECHREP</b>	comprehensive technical report

<b>CONAR</b>	commanding officer's narrative report
<b>CONCAP</b>	construction capabilities contract; emergency construction capabilities contract
<b>CONOPS</b>	concept of operations
<b>CONPLAN</b>	concept plan; operation plan in concept format
<b>CONREP</b>	connected replenishment
<b>CONSCAN</b>	conical scan
<b>CONSOL</b>	consolidation of cargo between replenishment ships
<b>CONUS</b>	Continental United States
<b>CONV</b>	convoy
<b>COOP</b>	craft of opportunity
<b>COP</b>	combat outpost; common operational picture
<b>COPS</b>	communications planning support; current operations; computer-oriented partial sum
<b>COPS-II</b>	computer-oriented partial sum II
<b>CORS</b>	composite operational reporting system
<b>COS</b>	chief of staff; cosine; current operations section
<b>COSAG</b>	combination steam and gas
<b>COSAL</b>	coordinated shipboard allowance list
<b>COSRO</b>	conical scan-on-receive-only
<b>COT</b>	commanding officer of troops
<b>COTP</b>	captain of the port
<b>COTR</b>	contracting officer's technical representative
<b>COTS</b>	cargo offload and transfer system; commercial off-the-shelf
<b>COVEC</b>	covert vector
<b>COWAN</b>	coalition-wide area network
<b>CP</b>	casualty panel; casualty power; casualty procedures; change proposal; coded pulse; command post; communications processor; computed position; computer programmer; concrete piercing; control point; counter proliferation
<b>CPA</b>	chairman's program assessment; closest point of approach

<b>CPAM</b>	CNO program analysis memorandum
<b>CPAR</b>	closest point of approach range
<b>CPD</b>	combat plans division; cryptograhic period designator; cumulative probability of detection
<b>CPDB</b>	characteristics and performance database
<b>CPFF</b>	cost plus fixed fee
<b>CPFG</b>	CNO policy and fiscal guidance
<b>CPHD</b>	copperhead
<b>CPI</b>	coastal patrol and interdiction; crash position indicator
<b>CPIF</b>	cost plus incentive fee
<b>CPM</b>	critical path method
<b>CPP</b>	computer program package; controllable pitch propeller
<b>CPPC</b>	cost plus percentage of cost
<b>CPPS</b>	computer program performance specification
<b>CPS</b>	controller processor signal; collective protection system
<b>CPTRP</b>	computer program test procedures
<b>CPU</b>	central processing unit; chemical protective undergarment; computer processing unit
<b>CPX</b>	command post exercise
<b>CQ</b>	carrier qualification
<b>CQB</b>	close quarters combat
<b>CRA</b>	command relationships agreement; coordinating review authority
<b>CRATT</b>	covered radioteletype
<b>CRC</b>	combat reconnaissance crew; control and reporting center; crisis response cell; cryptologic resource coordinator; cyclic redundancy check
<b>CRCC</b>	combined rescue coordination center
<b>CRE</b>	control and reporting element
<b>CREDO</b>	Chaplain's Religious Enrichment Development Operation
<b>CRG</b>	communication reporting gate; communications relay group; cryptologic resource group

<b>CRI</b>	collective routing indicator
<b>CRITIC</b>	critical intelligence report
<b>CRITICOMM</b>	critical communications
<b>CRM</b>	cabinet resource manager; crew resource management; corrosion related magnetic
<b>CRN</b>	contract reference number
<b>CRO</b>	CRT readout
<b>CROSSTAC</b>	cross tactic
<b>CRP</b>	controllable reversible pitch; command religious program
<b>CRPA</b>	controlled radiation pattern antenna
<b>CRRC</b>	combat rubber raiding craft
<b>CRT</b>	cathode ray tube; combat response team; combat rated thrust
<b>CRTS</b>	casualty receiving and treatment ship
<b>CRUDESGRU</b>	cruiser destroyer group
<b>CRZ</b>	contamination-reduction zone; controlled reaction zone
<b>CS</b>	combat system; combat support
<b>CSA</b>	close support area; combat systems assessment; combat support area
<b>CSABR</b>	course, speed, altitude, bearing, and range
<b>CSAR</b>	combat search and rescue
<b>CSAT</b>	combat system alignment test
<b>CSBOT</b>	combat system onboard trainer
<b>CSC</b>	combat system coordinator; computer set control; computer software component; combat stress control
<b>CSCC</b>	coastal sea control commander; combat system casualty control
<b>CSD</b>	chemical-support division; civil support detachment; combat system doctrine; combat system detection
<b>CSDR</b>	combat system design requirement
<b>CSDS</b>	command ship data system
<b>CSE</b>	course; common support equipment; combat system engineer
<b>CSEA</b>	combat system engineering agent

<b>CSED</b>	combat system engineering development
<b>CSSES</b>	combat system equipment space; critical safe enable switch; canister/safe/enable switch
<b>CSF</b>	carrier strike force
<b>CSG</b>	carrier strike group; command signal generator; cryptologic support group
<b>CSJ</b>	close support jamming
<b>CSL</b>	combat stores list
<b>CSM</b>	chemical surety material; combat system management (workstation); combat system manager
<b>CSMP</b>	combat system management plan; current ship's maintenance project
<b>CSMS</b>	combat system maintenance supervisor
<b>CSMT</b>	closely spaced multiple target; close space missile target
<b>CSN</b>	channel sequence number
<b>CSOI</b>	critical signal of interest
<b>CSOT</b>	combat system operability test
<b>CSQT</b>	combat system qualification test
<b>CSRF</b>	common source route file
<b>CSS</b>	central security service; combat service support; communications subsystem; coordinator surface search; coastal systems station; combat system services; communications security system; contingency support study
<b>CSSA</b>	cryptologic shore support activity
<b>CSSD</b>	combat service support detachment
<b>CSSE</b>	civil engineering support equipment; combat service support element; combat system support equipment
<b>CSSG</b>	combat service support group
<b>CSSP</b>	Combined Services Support Program
<b>CSSQT</b>	combat system ship qualification trial
<b>CSTAR</b>	combat systems training and readiness
<b>CSTOM</b>	combat system technical operations manual
<b>CSTOT</b>	combat system team operational trainer

<b>CSTT</b>	combat system training team
<b>CSU</b>	communications switching unit
<b>CSV</b>	countersurveillance
<b>CT</b>	counterterrorist
<b>CTA</b>	command to active
<b>CTC</b>	cargo tank cleaning; contact; counterterrorist center
<b>CTCG</b>	coordinative track control group
<b>CTCZ</b>	carrier tactical control zone
<b>CTD</b>	classify track display; common tactical dataset; conductivity, temperature, depth; central target director
<b>CTE</b>	commander, task element
<b>CTF</b>	commander, task force; combined task force
<b>CTFM</b>	continuous transmission frequency modulated
<b>CTG</b>	commander, task group
<b>CTIMS</b>	command tactical information management system; contact information management system; contact tactical information management system
<b>CTO</b>	computer tasking order
<b>CTOL</b>	conventional takeoff and landing
<b>CTOT</b>	coordinated time on top
<b>CTP</b>	common tactical picture; comparative test plan; continuing training plan; coordinated test plan
<b>CTS</b>	central track stores; control time slot; course-to-steer; communications tracking system; current time sensing
<b>CTSI</b>	common track stores indicator
<b>CTSL</b>	central track stores locator; communication target signal list
<b>CTT</b>	commander's tactical terminal
<b>CTTG</b>	countertargeting
<b>CTU</b>	commander task unit; contracting team unit
<b>CTV</b>	common test vehicle
<b>CUCV</b>	commercial utility cargo vehicle

<b>CUDIX</b>	common user digital information exchange system
<b>CURV</b>	cable-controlled underwater recovery vehicle
<b>CUS</b>	course (heading)
<b>CUU</b>	camouflaged utility uniform (Navy and Coast Guard)
<b>CV</b>	multipurpose aircraft carrier; cardiovascular; cargo variant; carrier vessel; check valve; community variable; crypto variable; carrier; curriculum vitae
<b>CV-ASWM</b>	carrier antisubmarine warfare module
<b>CVBG</b>	carrier battle group (obsolete)
<b>CVC</b>	consecutive voyage charter
<b>CVIC</b>	carrier intelligence center
<b>CVN</b>	multipurpose aircraft carrier (nuclear-propulsion)
<b>CVNS</b>	carrier navigation system
<b>CVR</b>	cockpit voice recorder
<b>CVRS</b>	cassette video recording system
<b>CVT</b>	controlled variable time
<b>CVW</b>	carrier air wing; cryptovisible weekly (GPS)
<b>CW</b>	carrier wave; chemical warfare; continuous wave; clockwise
<b>CWAN</b>	coalition wide area network
<b>CWAR</b>	continuous wave acquisition radar
<b>CWAT</b>	continuous wave acquisition and track
<b>CWC</b>	composite warfare commander
<b>CWDS</b>	combat weapon delivery software
<b>CWI</b>	continuous wave illuminator
<b>CWOSM</b>	composite warfare oceanographic support modules
<b>CWP</b>	causeway pier
<b>CWS</b>	control wheel steering
<b>CWSS</b>	cold weather shelter system
<b>CWWD</b>	chemical warfare directional detector



<b>CWX</b>	continuous wave transmitter
<b>CZ</b>	convergence zone; combat zone
<b>CZR</b>	convergence zone range
<b>CZW</b>	convergence zone width
<b>D/A</b>	detection/acquisition; digital/analog
<b>D/E</b>	depression/elevation
<b>D/L</b>	data link
<b>DA</b>	density altitude; direct action; drug abuse
<b>DAA</b>	designated approving authority
<b>DACM</b>	defensive air combat maneuvering
<b>DAFIF</b>	digital aeronautical flight information files
<b>DAM</b>	deep water ASW mine; damaged
<b>DAMP</b>	digital antenna mast program
<b>DAO</b>	defense attaché officer
<b>DAP</b>	defensive armed penetrator; DEMON/audio processor
<b>DAR</b>	desired area for rescue; diopter adjustment ring
<b>DARS</b>	daily aerial reconnaissance syndicate
<b>DAS</b>	deep air support; defensive avionics system; direct air support
<b>DAST</b>	disaster assessment survey team
<b>DBDB</b>	digital bathymetric database
<b>DBF</b>	digital beamformer; DIMUS beamformer
<b>DC&amp;T</b>	detection, classification, and targeting
<b>DCC</b>	damage control center; deployment control center
<b>DCI</b>	display control indicator
<b>DCM</b>	dangerous cargo manifest; defensive countermeasures; display casualty mode; drydock continuous maintenance; defensive combat maneuvering
<b>DCMS</b>	digital communications management system; director, COMSEC material system
<b>DCOS</b>	deputy chief of staff

<b>DCRS</b>	damage control repair station; digital camera receiving station
<b>DCST</b>	Defense Logistics Agency contingency support team
<b>DCU</b>	data conversion unit; data converter unit; debark control unit; display control unit
<b>DD</b>	deck drain (without closure device); destroyer; diesel direct; differential Doppler; direct deployment
<b>DDC</b>	data display console; deck decompression chamber; detection data converter; digital data converter
<b>DDD</b>	desired delivery date; digital data distribution
<b>DDG</b>	guided missile destroyer
<b>DDI</b>	deceptive electronic countermeasures decoy integration; DECM/decoy integration; digital display indicator
<b>DDR</b>	digital data recorder; document discrepancy report
<b>DDS</b>	data display subsystem; data distribution subsystem; data distribution system; digital data set; digital data storage; distributed data system; dry deck shelter
<b>DE</b>	damage expectancy; data extraction; depression angle; depression/elevation; depth excess; diesel electric; directed energy; dissemination element; Doppler enable
<b>DEA</b>	deceptive electronic attack; Drug Enforcement Administration
<b>DEAD</b>	destruction of enemy air defenses
<b>DEFCON</b>	defense readiness condition
<b>DEGSVC</b>	degaussing services
<b>DEMODO</b>	demodulation
<b>DER</b>	digital electronic readout
<b>DESRON</b>	destroyer squadron
<b>DEST</b>	domestic emergency-support team
<b>DF</b>	direction finding; dispersion factor; disposition form
<b>DFAD</b>	DF analog display; digital feature analysis data
<b>DFAMS</b>	defense fuel automated management system
<b>DFD</b>	delayed-firing device
<b>DFE</b>	digital filter element; digital filtering element
<b>DFM</b>	deterrent force module; diesel fuel, marine

<b>DG</b>	diesel generator; downgrade
<b>DGPS</b>	differential global positioning system
<b>DGS</b>	data gathering system
<b>DI</b>	directivity index
<b>DIFF</b>	difference; difference frequency; differential
<b>DIG</b>	data interface group
<b>DISMS</b>	defense integrated subsistence management system
<b>DISN</b>	defense information systems network
<b>DISSUB</b>	distressed/disabled submarine
<b>DITAC</b>	DIFAR pointing tactic
<b>DIU</b>	data interface unit
<b>DIV</b>	division
<b>DIWSA</b>	digital imagery workstation afloat
<b>DLA</b>	data link address; deck launched alert; Defense Logistics Agency; designated landing area
<b>DLC</b>	down-link communication; downlink call-up
<b>DLIR</b>	downward-looking infrared
<b>DLJ</b>	down-link jamming
<b>DLO</b>	director lock-on
<b>DLPP</b>	data link preprocessor
<b>DLQ</b>	deck landing qualification
<b>DLRP</b>	data reference point
<b>DMAT</b>	defective material assistance team
<b>DMB</b>	datum marker buoy
<b>DMC</b>	defense movement coordinator
<b>DMI</b>	destructive mutual interference
<b>DMINS</b>	dual miniature inertial navigation system
<b>DMP</b>	data management processor; depot modernization period; direct measurement program

<b>DMR</b>	digital modular radio
<b>DMTI</b>	digital moving target indicator
<b>DNC</b>	digital nautical chart
<b>DNCU</b>	data net control unit
<b>DNP</b>	dummy nose plug
<b>DNS</b>	Doppler navigation sonar; Doppler navigation system
<b>DOB</b>	defensive order of battle; depth of burst
<b>DOC</b>	Department of Commerce; designed operational capability; direct operator control
<b>DOCC</b>	deep operations coordination cell
<b>DODAAD</b>	Department of Defense activity address directory
<b>DOF</b>	degrees of freedom; depth of fire
<b>DON</b>	Department of the Navy
<b>DOOW</b>	diving officer of the watch
<b>DOP</b>	dilution of precision; dilution of processing; designated overhaul point
<b>DORA</b>	data operational retrieval analysis; distribution of report analysis
<b>DOS</b>	day of supply
<b>DOT</b>	deep ocean transponder; desert operation trailer; detection opportunity time
<b>DOW</b>	died of wounds
<b>DP</b>	direct path
<b>DPC</b>	deception planning cell
<b>DPCA</b>	displaced phase center antenna
<b>DPM</b>	docking phased maintenance
<b>DPO</b>	directed planning option; disaster preparedness officer
<b>DPOSD</b>	deployed port operations, security, and defense (USCG)
<b>DPP</b>	deliberate planning process
<b>DPSC</b>	data processing service center
<b>DPSK</b>	digital phase shift keying

<b>DR</b>	dead reckoning; decision range; destruct range; diesel reduction; designated overhaul point
<b>DRA</b>	dead reckoning analyzer
<b>DRAM</b>	dynamic random access memory
<b>DRB</b>	discarding rotating band; doctrine review board
<b>DRF</b>	disaster-relief fund; disaster-response force
<b>DRFM</b>	digital radio frequency memory
<b>DRU</b>	dynamic reference unit
<b>DS</b>	direct sequence; direct support; directed search; doctrine statement
<b>DSAM</b>	defense system analysis module
<b>DSC</b>	deep sound channel
<b>DSCA</b>	deep sound channel axis
<b>DSCS</b>	defense satellite communications system
<b>DSD</b>	data sharing device; deep submergence device; digital sharing devices; dynamic situation display
<b>DSIATP</b>	defense sensor interpretation and application training program
<b>DSL</b>	deep scattering layer
<b>DSMAC</b>	digital scene matching area correlation
<b>DSN</b>	defense services network; defense switched network
<b>DSO</b>	defensive systems officer; domestic-support operations
<b>DSOPS</b>	direct support operations
<b>DSP</b>	designated stock point
<b>DSRA</b>	docking selected restricted availability
<b>DSRS</b>	deep submergence rescue system
<b>DSRV</b>	deep submergence rescue vehicle
<b>DSS</b>	decision support system
<b>DSSS</b>	direct sequence spread spectrum
<b>DST</b>	decision support template; defense scientific technical; destructor (mine)
<b>DSTS</b>	daily signals intelligence technical summary

<b>DSU</b>	data storage unit; digital service unit
<b>DSV</b>	deep submerge vehicle
<b>DTAS</b>	depressed towed array sonar
<b>DTAV</b>	Department of Defense total asset visibility
<b>DTC-2</b>	second generation desktop tactical support computer
<b>DTD</b>	data transport device; detailed troop decontamination; dip-to-dip
<b>DTM</b>	detector tracker monitor; digital target materials; digital terrain matrix
<b>DTRANSEDI</b>	Department of Defense transportation electronic data interchange
<b>DTT</b>	designated test target; dynamic test target
<b>DV</b>	Doppler vector; drain valve
<b>DVD</b>	direct vendor delivery; direct view display
<b>DVS</b>	Doppler velocity sensor
<b>DWS</b>	defensive weapon subsystem; demineralized water system
<b>DWT</b>	deadweight tonnage; demineralized water transfer system
<b>DZ</b>	drop zone
<b>E/L</b>	equipment list
<b>E/I</b>	echo-to-interference ratio
<b>EAB</b>	emergency air breathing
<b>EAD</b>	earliest arrival date
<b>EAf</b>	expeditionary airfield
<b>EAM</b>	emergency action message
<b>EAN</b>	electromechanical acoustic noisemaker
<b>EAo</b>	electronic attack officer
<b>EAP</b>	emergency action plan; emergency action procedures
<b>EAS</b>	electronic altitude sensing; equivalent airspeed
<b>EASAR</b>	enhanced and inverse synthetic aperture radars
<b>EASOP</b>	emergency action standard operating procedures
<b>EAT</b>	expected approach time

<b>EAW</b>	electronic assembly warhead
<b>EBHA</b>	electronic battle hit assessment
<b>EBS</b>	environmental baseline survey; expeditionary bomb squadron
<b>ECA</b>	enemy capabilities analysis
<b>ECB</b>	electronic communications buoy
<b>ECDIS</b>	electronic chart display and information system
<b>ECG</b>	electronic combat group; emission control gate; environment control gate; equal angle coverage; exercise controller guide
<b>ECI</b>	engineering change instruction
<b>ECL</b>	engine condition lever
<b>ECM</b>	electronic countermeasures
<b>ECMU</b>	extended core memory unit
<b>EOCA</b>	enemy course of action
<b>ECON</b>	economical
<b>ECT</b>	embarkation control team
<b>ECU</b>	emitter classification unit; environmental control unit
<b>EDA</b>	estimated date of arrival
<b>EDAC</b>	error detection and correction
<b>EDB</b>	emitter database
<b>EDC</b>	engine driven compressor
<b>EDD</b>	earliest delivery date; earliest departure date
<b>EDI</b>	electronic data interchange
<b>EDM</b>	effective downwind message; enhanced data mode
<b>EDO</b>	engineering duty officer
<b>EDOD</b>	estimated date of delivery
<b>EDSRA</b>	extended docking selected restricted availability
<b>EE</b>	emergency electric; engineering evaluation
<b>EEAT</b>	emergency expected approach time



<b>EECU</b>	engine electrical control unit
<b>EER</b>	extended echo ranging
<b>EEU</b>	environmental engineering unit
<b>EFD</b>	electric firing device; engineering field division
<b>EFF</b>	effectiveness
<b>EFPH</b>	effective full power hours
<b>EFR</b>	engine firing rate
<b>EFRT</b>	emitter file recycle time
<b>EFTO</b>	encrypt for transmission only
<b>EFW</b>	effective fallout wind
<b>EGL</b>	equipment guide list
<b>EGR</b>	electrographic gram recorder
<b>EGS</b>	electronic glideslope
<b>EHF</b>	extremely high frequency
<b>EIC</b>	equipment identification code; exercise intelligence center
<b>EID</b>	electronic identification; emitter identification data
<b>EIS</b>	environmental impact statement
<b>EJO</b>	eject only
<b>EKMS</b>	electronic key management system
<b>ELBA</b>	emergency locator beacon
<b>ELCID</b>	early limited combat identification
<b>ELD</b>	emitter locating data
<b>ELF</b>	extremely low frequency
<b>ELOS</b>	extended line of sight
<b>ELP</b>	estimated launch position
<b>ELSF</b>	expeditionary logistics support force
<b>ELT</b>	electronic light table; enforcement of laws and treaties
<b>ELV</b>	expendable launch vehicle

<b>ELX</b>	electronics enclosure; emitter library index
<b>EM</b>	electromagnetic; executive manager
<b>EMATT</b>	expendable mobile acoustic training target; expendable mobile USW training target; expendable mobile ASW training target
<b>EMBO</b>	embarkation officer/order
<b>EMCC</b>	en route movement control center
<b>EMCON</b>	emission control
<b>EME</b>	electromagnetic energy; electromagnetic environment
<b>EMF</b>	expeditionary medical facility
<b>EMI</b>	electromagnetic imaging; electromagnetic interface; electromagnetic interference
<b>E-MIO</b>	expanded maritime interception operations
<b>EMLOC</b>	emitter localization
<b>EMP</b>	electromagnetic propagation; electromagnetic pulse
<b>EMPSKED</b>	employment schedule
<b>EMR</b>	electromagnetic radiation; execution management replanner
<b>EMRM</b>	equipment maintenance related material
<b>EMS</b>	electromagnetic silencing; electromagnetic spectrum; element management system; embedded memory subsystem; embedded memory system; emergency medical ser- vices; expeditionary maintenance squadron
<b>EMV</b>	electromagnetic vulnerability
<b>EMW</b>	expeditionary maneuver warfare
<b>ENDI</b>	enhanced chaff discriminant
<b>ENSYN</b>	electromagnetic environment synthesizer
<b>ENT</b>	ear, nose, and throat; evening nautical twilight
<b>EO</b>	electro-optical; end office; equal opportunity; executive order; eyes only
<b>EOB</b>	electronic order of battle; enemy order of battle
<b>EOC</b>	early operational capability; emergency operations center
<b>EOCC</b>	engineering operational casualty control
<b>EOD</b>	explosive ordnance disposal

<b>EO-IR</b>	electro-optical-infrared
<b>EOR</b>	end-of-run; engage on remote
<b>EORSAT</b>	electronic intelligence ocean reconnaissance satellite
<b>EOS</b>	electro-optical sight; enclosed operating station; engine operating station
<b>EOSS</b>	electro-optical sensor system; engineering operational sequencing system
<b>EOT</b>	engine order telegraph; end of tape
<b>EOTS</b>	expanded ocean thermal structure
<b>EPA</b>	Environmental Protection Agency; evasion plan of action
<b>EPC</b>	electrical power center
<b>EPE</b>	estimated position error
<b>EPIRB</b>	emergency position indicating radio beacon
<b>EPM</b>	emergency propulsion motor
<b>EPMU</b>	environmental protection medical unit
<b>EPP</b>	emergency power package
<b>EPS</b>	embedded processing system; engagement planning supervisor
<b>EPW</b>	enemy prisoner of war
<b>ERAP</b>	engineering readiness assessment program
<b>ERC</b>	elevation resolution cell; exercise-related construction; extended range cap
<b>ERDL</b>	extended-range data link
<b>ERG</b>	emergency recovery group
<b>ERGM</b>	extended-range guided munitions
<b>ERH</b>	elastomeric rotorhead
<b>ERMAR</b>	electronic reconnaissance mission analysis report
<b>ERO</b>	enable run offset; engine running on/offload; engineered refueling overhauls; equipment repair order
<b>ERP</b>	equipment reception point; effective radiated power
<b>ERS</b>	emergency recovery system; engine room supervisor; emergency relocation site
<b>ERT</b>	environmental response team; evidence response team

<b>ERTS</b>	emergency remote tracking station
<b>ESB</b>	en route support base; engineer support battalion
<b>ESD</b>	electrostatic discharge; exploitation support data; external sonar dome
<b>ESDS</b>	electrostatic discharge sensitive
<b>ESF</b>	emergency-support function; expeditionary strike force
<b>ESG</b>	expeditionary strike group
<b>ESI</b>	extremely sensitive information
<b>ESJ</b>	escort jamming
<b>ESOR</b>	emergency standoff range
<b>ESRA</b>	extended selected restricted availability
<b>ESS</b>	electronic system supervisor; expeditionary support squadron; explosive safety survey; external sound speed
<b>EST</b>	emergency-support team; establishing; fuel stripping
<b>ESTO</b>	estimated seeker turn-on
<b>ESUS</b>	explosive signal, underwater sound
<b>ESWL</b>	equivalent single wheel loading
<b>ET</b>	electronic time; exercise and training
<b>ETA</b>	estimated time of arrival
<b>ETADS</b>	enhanced transportation automated data system
<b>ETD</b>	estimated time of departure
<b>ETE</b>	estimated time en route
<b>ETI</b>	early transient incapacitation; ELINT technical information; emitter technical information; estimated time of intercept
<b>ETL</b>	earliest-time-to-launch; effective target length
<b>ETP</b>	equal time point
<b>ETR</b>	estimated time of recovery; estimated time of repair
<b>ETS</b>	emergency throttle system; engineering technical services; engineering time standards
<b>EUC</b>	end user computer
<b>EUSC</b>	effective US-controlled ships

<b>EW</b>	early warning; electronic warfare
<b>EW/TSS</b>	electronic warfare and target sensing systems
<b>EWC</b>	electronic warfare coordinator
<b>EWC&amp;R</b>	electronic warfare coordination and reporting (net)
<b>EWCAS</b>	electronic warfare in support of close air support
<b>EWCC</b>	electronic warfare coordination cell
<b>EWCM</b>	electronic warfare coordination module
<b>EWCS</b>	electronic warfare control ship
<b>EWDS</b>	electronic warfare database support
<b>EXCM</b>	expendable countermeasures
<b>EXER</b>	exercise
<b>EXPL</b>	explosive
<b>EXPLAN</b>	exercise plan
<b>EXT</b>	exterior
<b>EXTAC</b>	experimental tactic
<b>EXWEP</b>	exercise weapon
<b>EZ</b>	evacuation zone; exclusion zone
<b>F/L</b>	force list
<b>F/V</b>	fishing vessel
<b>F/W</b>	fixed wing
<b>FAC</b>	forward air controller
<b>FAC(A)</b>	forward air controller (airborne)
<b>FACP</b>	forward air control party; forward air control post
<b>FACSFAC</b>	fleet area control and surveillance facility
<b>FAD</b>	fighter air director; fleet air defense; force activity designator; force air defense; fighter air direction
<b>FAG</b>	forward air guide
<b>FAIRDEX</b>	fleet air defense exercise

<b>FAMEX</b>	familiarization exercise
<b>FAMP</b>	forward area minefield planning
<b>FAP</b>	fast action procedures; fleet assistance program
<b>FAR</b>	false alarm rate; federal acquisition regulation; federal aviation regulation
<b>FARC</b>	fly-away recompression chamber
<b>FARP</b>	forward arming and refueling point
<b>FARRP</b>	forward arming, refueling, and resupply point
<b>FASO</b>	fleet aviation specialized operational training group
<b>FAST</b>	fleet acoustic silencing test; fleet air superiority training; fleet antiterrorism security team; forward area support terminal; forward area surgical team
<b>FASTASS</b>	fast towed array sonar system
<b>FASWC</b>	force antisubmarine warfare commander
<b>FAT</b>	fly-away team
<b>FAV</b>	fast attack vehicle
<b>FAX</b>	facsimile
<b>FBH</b>	force beachhead
<b>FBHL</b>	force beachhead line
<b>FBM</b>	flat bottom; fleet ballistic missile
<b>FBP</b>	fast patrol boat
<b>FBT</b>	fine bearing tracker; frequency bearing time
<b>FC</b>	field change; fire control; force coordinator; frequency compatibility; field circular; final coordination; floating causeway; floating craft; force commander
<b>FCCBMP</b>	fleet command center battle management program
<b>FCE</b>	fire control element; fire control executive; forward command element
<b>FCL</b>	fire (final) coordination line
<b>FCLP</b>	field carrier landing practice
<b>FCM</b>	full casualty mode
<b>FCO</b>	Federal coordinating officer; fire control officer
<b>FCP</b>	functional checkpilot; fire control party

<b>FCSSA</b>	force combat service support area
<b>FCT</b>	firepower control team
<b>FDA</b>	fixed distributed array
<b>FDBK</b>	feedback
<b>FDC</b>	fire direction center
<b>FDCS</b>	flight deck communications system
<b>FDD</b>	flight deck director
<b>FDDS</b>	flag data display system
<b>FDL</b>	fault detection and localization; forward area air defense data link; forward deployable laboratory; fast deployment logistics
<b>FDLL</b>	free deck launch line
<b>FDLP</b>	flight deck landing practice
<b>FDM</b>	figure of demerit; frequency division multiplexed
<b>FDO</b>	fighter duty officer; flexible deterrent option; flight deck officer
<b>FDP</b>	fighter direction post; food distribution point; frequency domain processor
<b>FDP&amp;E</b>	force deployment planning and execution
<b>FDS</b>	fixed distributed system; fixed distribution system
<b>FDSS</b>	flight deck status and display system
<b>FDSSS</b>	flight deck status and signaling system
<b>FDT</b>	first destination transportation
<b>FDU</b>	file data update; fire direction unit; fire director unit
<b>FDX</b>	full duplex
<b>FEBA</b>	forward edge of the battle area
<b>FEC</b>	far edge control
<b>FED</b>	five-inch evasion device
<b>FEP</b>	final evaluation period; fleet satellite (FLTSAT) extremely high frequency (EHF) package
<b>FEPOC</b>	final evaluation period operations center
<b>FEPROM</b>	flash electrically programmable read-only memory



<b>FEZ</b>	fighter engagement zone
<b>FF</b>	Navy fast frigate; fast frigate; flight ferry
<b>FFDL</b>	fighter-to-fighter data link
<b>FFE</b>	fire for effect
<b>FFG</b>	guided missile frigate
<b>FFL</b>	friendly frontlines
<b>FFN</b>	fleet flash net
<b>FFP</b>	false force presentation
<b>FFZ</b>	free fire zone
<b>FGLS</b>	force generation levels
<b>FGS</b>	final governing standards
<b>FH</b>	fleet hospital
<b>FHP</b>	force health protection
<b>FHSO</b>	fleet hospital support office
<b>FIC</b>	fleet intelligence center; force identification coordinator
<b>FICC</b>	frequency interference control center
<b>FID</b>	force identification
<b>FIDO</b>	force identification officer
<b>FIK</b>	fault isolation kit
<b>FILL</b>	fleet issue load list
<b>FIP</b>	fleet improvement program; fleet indoctrination program; fleet introduction program
<b>FIR</b>	finite impulse response; flight information region
<b>FIS</b>	fleet introduction site; force information service
<b>FISC</b>	fleet and industrial supply center
<b>FISP</b>	fly-in support package
<b>FIST</b>	fire support team; fleet imagery support terminal
<b>FL</b>	full load; flight line
<b>FLAS</b>	flight line aid station

<b>FLC</b>	force logistics coordinator
<b>FLCC</b>	force logistics coordination center (USMC)
<b>FLEACT</b>	fleet activity(ies)
<b>FLETAC</b>	fleet tactical
<b>FLG</b>	flagship
<b>FLICON</b>	flight quarters condition
<b>FLIR</b>	forward-looking infrared
<b>FLIT</b>	frequency line integration tracker
<b>FLLS</b>	Fresnel lens landing system
<b>FLO/FLO</b>	float-on/float-off
<b>FLOT</b>	forward line of own troops
<b>FLR</b>	field level repair; flight line reference; forward-looking radar
<b>FLRP</b>	fighter link reference point
<b>FLS</b>	forward logistic site
<b>FLSG</b>	force logistic support group
<b>FLSIP</b>	fleet logistics support improvement program
<b>FLSR</b>	forward logistic site representative
<b>FLT</b>	fleet; flight
<b>FLTBCST</b>	fleet broadcast
<b>FLTCINC</b>	fleet commander in chief
<b>FLTI</b>	FRAZ long-time integration
<b>FLTRECCE</b>	fleet reconnaissance
<b>FLTSAT</b>	fleet satellite
<b>FLTSATCOM</b>	fleet satellite communications
<b>FLTAC</b>	fleet tactical
<b>FM</b>	force module
<b>FMA</b>	fleet maintenance activity
<b>FMAV</b>	fleet maintenance activity availability

<b>FMC</b>	full mission capable; field medical card
<b>FMCAT</b>	fleet mail center augment team
<b>FMCC</b>	force movement control center
<b>FMCR</b>	Fleet Marine Corps Reserve
<b>FMDD</b>	fleet maintenance diving detachment
<b>FMECA</b>	failure modes and effects criticality analysis
<b>FMF</b>	Fleet Marine Force
<b>FMOCC</b>	fleet mobile operational command center
<b>FMOP</b>	frequency modulation on pulse
<b>FMR</b>	frequency modulated ranging
<b>FMT</b>	frequency managed training
<b>FMU</b>	frequency measurement unit
<b>FO</b>	forward observer; foldout; fuel oil; fiber optic; flash override
<b>FOB</b>	forward operating base; forward operations base; friendly order of battle
<b>FOC</b>	full operational capability; furthest-on circle
<b>FOD</b>	foreign object damage; figure of demerit; field operations division
<b>FOI</b>	frequency of interest
<b>FOM</b>	figure of merit
<b>FON</b>	freedom of navigation
<b>FOP</b>	furthest-on point
<b>FOR</b>	force; field of regard
<b>FORAC</b>	for action
<b>FORM</b>	formation
<b>FORWEPCON</b>	forward weapons controller
<b>FOS</b>	follow-on sustainment; full operating status; fall of shot
<b>FOSIF</b>	fleet ocean surveillance information facility
<b>FOSP</b>	follow-on support package
<b>FOT</b>	frequency of optimum transmission

<b>FOTC</b>	force over-the-horizon track coordinator
<b>FOU</b>	fuel operating unit
<b>FP</b>	firing point; force protection; frequency panel
<b>FPC</b>	field press censorship; final planning conference
<b>FPCON</b>	force protection condition
<b>FPF</b>	final protective fire
<b>FPO</b>	force protection officer
<b>FPOC</b>	force protection operations center
<b>FPPWP</b>	first preplanned waypoint
<b>FPT</b>	full period terminations
<b>FPU</b>	forward participating unit
<b>FREQ</b>	frequency
<b>FRS</b>	fleet replacement squadron
<b>FS/DO</b>	force security/defense officer
<b>FS/DOC</b>	force security/defense operations center
<b>FSA</b>	field support activity
<b>FSB</b>	fire support base; forward staging base; forward support base; forward support battalion
<b>FSC</b>	fire support coordinator
<b>FSCL</b>	fire support coordination line; friendly sea control lanes
<b>FSCM</b>	fire support coordinating measure
<b>FSCO</b>	force security operation center
<b>FSCS</b>	fleet satellite communications system
<b>FSE</b>	fire support element
<b>FSG</b>	Federal supply group
<b>FSK</b>	frequency shift key
<b>FSN</b>	Federal stock number
<b>FSO</b>	fire support officer; flight safety officer; foreign service officer; force security officer (MPF operations); fleet support operations

<b>FSP</b>	full-spectrum processing
<b>FSS</b>	fast sealift ships; fire support station; flight service station; fast swept spat
<b>FSSG</b>	force service support group
<b>FST</b>	forward surgical team; fleet surgical team
<b>FSTC</b>	force surface track coordinator
<b>FSU</b>	fire support unit
<b>FSUWC</b>	force surface warfare commander
<b>FT</b>	force track
<b>FTA</b>	fast time analyzer
<b>FTAO</b>	force tactical action officer
<b>FTN</b>	FOTC track number
<b>FTOW</b>	fire control technician of the watch
<b>FTR</b>	fighter; firm track range
<b>FTS</b>	frequency time-sharing; fleet training strategy
<b>FTU</b>	freight terminal unit
<b>FTX</b>	field training exercise
<b>FU</b>	fire unit
<b>FUSS</b>	flexible universal stowage system
<b>FWA</b>	floating wire antenna
<b>GAA</b>	general agency agreement
<b>GAIL</b>	glide angle indicator light
<b>GAM</b>	global positioning system-aided munition
<b>GAS</b>	ground-aided seeker
<b>GAT</b>	guidance, apportionment, and targeting
<b>GATS</b>	general access time slots; global positioning system aided targeting system
<b>GBS</b>	ground-based sensor; global broadcast system
<b>GBU</b>	guided bomb unit
<b>GCA</b>	ground-controlled approach

<b>GCCS</b>	Global Command and Control System
<b>GCCS-M</b>	Global Command and Control System-Maritime
<b>GCE</b>	ground combat element (MAGTF)
<b>GCI</b>	ground control intercept
<b>GCU</b>	gyro control unit
<b>GDFS</b>	graphical data fusion system
<b>GE</b>	ground element
<b>GEM</b>	guidance-enhanced missile
<b>GEN</b>	generator
<b>GENSPEC</b>	general specifications for ships of the United States Navy
<b>GEOPLLOT</b>	geographic plot
<b>GEOREF</b>	geographic reference
<b>GEOSAT</b>	geodesy satellite
<b>G/F</b>	go-fasts
<b>GFAC</b>	ground forward air controller
<b>GFCC</b>	gunfire control computer
<b>GFCP</b>	generic front-end communications processor
<b>GFI</b>	ground fault interrupter
<b>GI</b>	government issue
<b>GIUK</b>	Greenland-Iceland-United Kingdom
<b>GLC</b>	group logistics coordinator
<b>GLF</b>	geolocation file
<b>GMB</b>	ground map beacon
<b>GMF</b>	geometric mean frequency
<b>GMT</b>	Greenwich Mean Time; general military training
<b>GMTR</b>	guided missile training round
<b>GNATS</b>	general noise and tonal system
<b>GND</b>	ground

## **NTRP 1-02**

<b>GOR</b>	general operational requirement
<b>GOTS</b>	government off-the-shelf
<b>GP</b>	general purpose; group
<b>GPD</b>	gallons per day
<b>GPETE</b>	general purpose electronic test equipment
<b>GPM</b>	gallons per minute
<b>GPS</b>	global positioning system
<b>GRP</b>	group; grid reference point
<b>GRU</b>	gridlock reference unit
<b>GRVM</b>	guided rising vertical mine
<b>GS</b>	ground speed
<b>GSI</b>	glide slope indicator
<b>GSID</b>	ground-emplaced seismic intrusion detector
<b>GSP</b>	geographic strip plot
<b>GT</b>	gun target
<b>GTR</b>	government transportation request
<b>GUCL</b>	general use (usage) consumables list
<b>GUNEX</b>	gunnery exercise
<b>GWOA</b>	guerilla warfare operational area
<b>H&amp;HS</b>	headquarters and headquarters squadron
<b>H&amp;I</b>	harassing and interdicting
<b>H&amp;S</b>	headquarters and service
<b>HA</b>	holding area; humanitarian assistance; hull array; helicopter attack; helicopter administrative
<b>HAB</b>	height above bottom
<b>HAD</b>	harbor approach defense
<b>HAF</b>	helicopter assault force
<b>HAFO</b>	high-altitude flyout

<b>HAG</b>	helicopter action group
<b>HAM</b>	horizontal attack maneuver
<b>HAPBB</b>	hull array passive broadband
<b>HAU</b>	heading and altitude unit; helicopter attack unit
<b>HAZCAT</b>	hazardous material category
<b>HAZCHEM</b>	hazardous chemicals
<b>HAZCOM</b>	hazardous commodity
<b>HAZMAT</b>	hazardous material
<b>HBW</b>	horizontal beam width
<b>HC</b>	half channel; helicopter coordinator
<b>HCA</b>	humanitarian and civic assistance; Hummer-controlled approach
<b>HCATM</b>	Harpoon captive air training missile
<b>HCE</b>	helicopter control element
<b>HCL</b>	homing control logic
<b>HCP</b>	Harpoon control panel
<b>HCPD</b>	high capacity point detonating
<b>HCS</b>	helicopter combat support (Navy); helicopter control station; helicopter coordination section; helicopter control ship
<b>HCU</b>	hand control unit; helicopter control unit
<b>HD</b>	harbor defense
<b>HDC</b>	harbor defense commander; helicopter direction center
<b>HDCC</b>	harbor defense coordination component
<b>HDCU</b>	harbor defense command unit
<b>HDPLX</b>	half duplex
<b>HDPS</b>	harbor defense/port security
<b>HDS</b>	harbor defense system
<b>HDT</b>	high duty technique
<b>HDTV</b>	high-definition television



<b>HDU</b>	helmet display unit
<b>HE</b>	heavy equipment; high explosive
<b>HEC</b>	helicopter element coordinator
<b>HECP</b>	harbor entrance control post
<b>HE-CVT</b>	high-explosive control variable time
<b>HEFS</b>	helicopter emergency flotation system
<b>HEIFER</b>	high-frequency relay
<b>HEL</b>	high-energy laser
<b>HELP</b>	helicopter extraction landing point
<b>HEPA</b>	high-efficiency particulate air
<b>HET</b>	Harpoon-embedded trainer; hostile environment training
<b>HF</b>	high frequency
<b>HFA</b>	high-frequency acoustic; high-frequency active
<b>HFBB</b>	high-frequency broadband
<b>HFDF</b>	high-frequency direction-finding
<b>HFM</b>	hyperbolic frequency modulated
<b>HFRB</b>	high-frequency regional broadcast
<b>HGMS</b>	Harpoon-guided missile simulator
<b>HICAP</b>	high-altitude combat air patrol; high capacity
<b>HICOM</b>	high command communications network
<b>HIDACZ</b>	high-density airspace control zone
<b>HIE</b>	helicopter insertion extraction
<b>HIFR</b>	helicopter in-flight refueling
<b>HIFRAG</b>	high fragmentation
<b>HIM</b>	high-explosive incendiary-tracer
<b>HIMAD</b>	high-to-medium altitude air defense
<b>HIMEZ</b>	high-altitude missile engagement zone
<b>HIPAR</b>	high-power acquisition radar

<b>HIPIR</b>	high-power illuminator radar
<b>HIU</b>	high-interest units
<b>HK</b>	handkey; hardkill
<b>HL/L</b>	helicopter land and launch
<b>HLA</b>	helicopter landing area
<b>HLD</b>	homeland defense
<b>HLH</b>	heavy-lift helicopter
<b>HLPS</b>	heavy-lift preposition ship
<b>HLS</b>	helicopter landing system; homeland security
<b>HLZ</b>	helicopter landing zone
<b>HM&amp;E</b>	hull, mechanical and electrical
<b>HMC&amp;M</b>	hazardous material control and management
<b>HMCS</b>	helmet mounted cueing system
<b>HMIS</b>	hazardous materials information system
<b>HNB</b>	hull narrowband
<b>HNS</b>	host-nation support
<b>HNVS</b>	helicopter night vision system
<b>HOCC</b>	humanitarian operations coordination center
<b>HOD</b>	high opening Doppler; home-on-decoy
<b>HOE</b>	height of eye
<b>HOJ</b>	home-on-jam
<b>HOSS</b>	helo observation surveillance system
<b>HOSTAC</b>	helicopter operations from ships other than aircraft carriers (U.S.N. publication)
<b>HOT</b>	home-on-target
<b>HOVERTAC</b>	hover tactic
<b>HP</b>	hit probability; high pressure
<b>HPA</b>	high power amplifier
<b>HPG</b>	hits per gun

<b>HPU</b>	harbor patrol unit
<b>HQ</b>	HAVE QUICK; headquarters
<b>HR</b>	half round
<b>HRD</b>	high-resolution detection; high-resolution display; high rate of discharge
<b>HRGM</b>	high-resolution ground map
<b>HRJS</b>	Heliborne Response Jamming System
<b>HRO</b>	humanitarian relief organizations
<b>HRPT</b>	high-resolution picture transmission
<b>HRR</b>	high-resolution radar
<b>HSB</b>	high-speed boat; hue, saturation, and brightness
<b>HSD</b>	heat sensing device
<b>HSG</b>	helicopter support group
<b>HSL</b>	surface-ship-based helicopter
<b>HSS</b>	health service support
<b>HSSE</b>	health service support element
<b>HSSO</b>	health service support officer
<b>HSST</b>	high-speed surface target
<b>HT</b>	homing transponder
<b>HT/SZ</b>	height/size
<b>HTA</b>	heavier than air
<b>HTW</b>	helicopter threat warning
<b>HUC</b>	helicopter unit commander
<b>HUK</b>	hunter/killer
<b>HULL</b>	high-usage load list
<b>HULTEC</b>	hull-to-emitter correlation
<b>HUMEVAC</b>	humanitarian emergency evacuation
<b>HVA</b>	high-value asset
<b>HVAAP</b>	high-value airborne asset protection

<b>HVAR</b>	high-velocity aircraft rocket
<b>HVBSS</b>	helicopter visit, board, search, and seizure
<b>HW</b>	hazardous waste
<b>HWCIP</b>	Harpoon weapon control indicator panel
<b>HWM</b>	high-water mark
<b>HXBT</b>	helicopter expendable bathythermograph
<b>HYFIX</b>	hyperbolic fix
<b>I&amp;L</b>	installation and logistics
<b>I&amp;T</b>	integration and testing
<b>I&amp;W</b>	indications and warning
<b>IA</b>	information assurance; information attack
<b>IAC</b>	interarray communication
<b>IACS</b>	integrated acoustic communications system
<b>IAD</b>	integrated acoustic display
<b>IADS</b>	interior audio distribution system; integrated air defense system
<b>IAP</b>	interarray processor
<b>IAS</b>	indicated airspeed
<b>IBD</b>	inshore boat detachment
<b>IBS</b>	integrated barcode scanner; integrated booking system
<b>IBU</b>	inshore boat unit
<b>IC</b>	interim change
<b>ICAD</b>	integrated control and display system
<b>ICADS</b>	integrated cover and deception system
<b>ICAPS</b>	integrated command (carrier) acoustic prediction system
<b>ICD</b>	international classification of diseases
<b>ICE</b>	imagery and communication environment
<b>ICLS</b>	instrument-controlled landing system
<b>ICO</b>	interface control officer

<b>ICP</b>	initial control point; inventory control point
<b>ICR</b>	intelligence collection requirement
<b>ICRL</b>	individual component repair list
<b>ICSC</b>	interior communications switching center
<b>ICW</b>	intermediate care ward
<b>ID</b>	identification
<b>IDC</b>	interactive display controller
<b>IDHS</b>	intelligence data handling system
<b>IDQ</b>	indefinite delivery and quantity
<b>IDS</b>	intrusion detection system
<b>IDSS</b>	integrated underwater surveillance system
<b>IDTC</b>	interdeployment training cycle
<b>IDTS</b>	instrument data transmission system
<b>IDZ</b>	inner defense zone
<b>IDZC</b>	inner defense zone coordinator
<b>IED</b>	improvised explosive device
<b>IER</b>	information exchange requirement
<b>IES</b>	intelligence exploitation system
<b>IESS</b>	imagery exploitation support systems
<b>IETM</b>	interactive electronic technical manual
<b>IFAR</b>	item frequency analysis report
<b>IFF</b>	identification, friend or foe
<b>IFR</b>	in-flight refueling
<b>IFS</b>	intermittent full scan
<b>IFT</b>	in-flight technician
<b>IFVG</b>	integrated fluid variator gearbox
<b>IIR</b>	imaging infrared; intelligence information report; initial intelligence report
<b>ILARTS</b>	integrated launch and recovery television surveillance system

<b>ILL</b>	illumination radar
<b>ILS</b>	instrument landing system; integrated logistic system
<b>ILSP</b>	integrated logistic support plan; integrated logistic support program
<b>IM</b>	intermediate maintenance; information management
<b>IMA</b>	intermediate maintenance activity
<b>IMINT</b>	imagery intelligence
<b>IML</b>	input monitor level
<b>IMM</b>	integrated materiel management
<b>IMN</b>	indicated Mach number
<b>IMO</b>	International Maritime Organization; immobilized
<b>IMOSS</b>	interim mobile oceanographic support system
<b>IMP</b>	inventory management plan
<b>IMSAT</b>	imagery satellite
<b>IMU</b>	inertial measurement unit; inertial measuring unit
<b>INC</b>	incendiary
<b>INCSEA</b>	incident(s) at sea
<b>IND</b>	indicator; improvised nuclear devices
<b>INFOCON</b>	information operations condition
<b>INFOMAT</b>	information management
<b>INOP</b>	inoperative (equipment)
<b>INR</b>	interference-to-noise ratio
<b>INRINT</b>	infrared intelligence
<b>INS</b>	Immigration and Naturalization Service; inertial navigation system; insert code
<b>INTAC</b>	interceptor tracking and control
<b>INTCOL</b>	intelligence collection
<b>INU</b>	inertial navigation unit
<b>IO</b>	information operations; input/output; intelligence officer; information objectives; intelligence oversight; international organization

<b>IOC</b>	input/output controller
<b>IOG</b>	inertial observer guidance
<b>IP</b>	interface processor
<b>IPAR</b>	improved pulse acquisition radar
<b>IPB</b>	intelligence preparation of the battlespace
<b>IPC</b>	initial planning conference
<b>IPL</b>	initial program load
<b>IQD</b>	internationally quarantinable disease
<b>IR</b>	incident report; information rate; information requirement; infrared; intelligence requirement; interference reduction
<b>IRAAM</b>	infrared-guided, air-to-air missile
<b>IRCCM</b>	infrared counter-countermeasures
<b>IRCM</b>	infrared countermeasures
<b>IRCS</b>	international radio call sign
<b>IRDS</b>	infrared detection set
<b>IRF</b>	Immediate Reaction Forces (NATO)
<b>IRG</b>	intelligence readiness group
<b>IRINT</b>	infrared intelligence
<b>IRST</b>	infrared search and track
<b>IRT</b>	initial response team
<b>IRU</b>	inertial reference unit
<b>IS</b>	initial search
<b>IS&amp;TW</b>	imagery screening and targeting workstation
<b>ISB</b>	independent sideband; intermediate staging base; intermediate support base
<b>ISO</b>	in support of
<b>ISR</b>	identification safety range
<b>ISS</b>	inertial subsystem; interim supply support
<b>ISSA</b>	inter-Service support agreement

<b>ISV</b>	internal sound velocity
<b>IT</b>	information technologies
<b>ITA</b>	intermediate time averaged
<b>ITB</b>	initial true bearing
<b>ITC</b>	integration time constant
<b>ITCP</b>	initial timing control point
<b>ITG</b>	initial terminal guidance
<b>ITI</b>	intermediate-time integration
<b>ITO</b>	installation transportation office; instrument takeoff
<b>ITPL</b>	integrated target priority list
<b>ITT</b>	interrogator/translator
<b>ITW</b>	imminent threat warning
<b>IUC</b>	immediate unit commander
<b>IUW</b>	inshore undersea warfare
<b>IUWCC</b>	inshore undersea warfare control center
<b>IUWDET</b>	inshore undersea warfare detachment
<b>IUWF</b>	inshore undersea warfare force
<b>IUWG</b>	inshore undersea warfare group
<b>IVA</b>	integrated vulnerability assessment
<b>IVCU</b>	internal voice communications unit
<b>IVDS</b>	independent variable depth sonar
<b>IVIPS</b>	integrated vessel information planning and analysis system
<b>IVSN</b>	Initial Voice Switched Network
<b>IWC</b>	information warfare commander
<b>IWDM</b>	intermediate water depth mine
<b>IWG</b>	interoperability working group
<b>IWO</b>	intelligence watch officer
<b>IWRC</b>	independent wire rope core



<b>IWWO</b>	information warfare watch officer
<b>J-2</b>	intelligence directorate of a joint staff
<b>JAAT</b>	joint air attack team
<b>JA/ATT</b>	joint airborne and air transportability training
<b>JACC</b>	joint airspace control center
<b>JACE</b>	joint alternate command element
<b>JAG</b>	Judge Advocate General
<b>JAM</b>	jamming
<b>JANAP</b>	Joint Army, Navy, Air Force Publication
<b>JATC</b>	joint air traffic control
<b>JATF</b>	joint amphibious task force
<b>JATO</b>	jet-assisted takeoff
<b>JAVA</b>	jamming amplitude vs azimuth
<b>JCA</b>	jam control authority
<b>JCIDO</b>	Joint Combat Identification Office
<b>JCN</b>	job control number
<b>JCS</b>	Joint Chiefs of Staff
<b>JCU</b>	jammer control unit
<b>JDAM</b>	joint direct attack munitions
<b>JDF</b>	jam direction finder
<b>JDS</b>	joint deployment system
<b>JEL</b>	Joint Electronic Library
<b>JEPES</b>	joint engineering planning execution system
<b>JEZ</b>	joint engagement zone
<b>JFACC</b>	joint force air component commander
<b>JFC</b>	joint force commander
<b>JFFC</b>	joint forces fires coordinator
<b>JFL</b>	joint forward laboratory

<b>JFLCC</b>	joint force land component commander
<b>JFMCC</b>	joint force maritime component commander
<b>JFUB</b>	joint facilities utilization board
<b>JIADS</b>	joint integrated air defense system
<b>JIATF</b>	joint interagency task force (DOD)
<b>JIC</b>	joint intelligence center
<b>JICC</b>	joint information coordination center
<b>JICO</b>	joint interface control officer
<b>JIPB</b>	joint intelligence preparation of the battlespace
<b>JLC</b>	joint logistics commanders
<b>JLLS</b>	joint lessons learned system
<b>JMA</b>	joint mission area
<b>JMBO</b>	joint military blood office
<b>JMCIS</b>	joint maritime command information system
<b>JMCOMS</b>	joint maritime communications system
<b>JMET</b>	joint mission essential task
<b>JMF</b>	joint maritime force
<b>JMTOP</b>	joint multitactical digital information link operating procedures
<b>JNACC</b>	joint nuclear accident coordination center
<b>JOA</b>	joint operations area
<b>JOCC</b>	joint operations command center
<b>JOI</b>	jamming on intercept
<b>JOP</b>	joint operating procedure
<b>JOPS</b>	joint operation planning system
<b>JPO</b>	joint petroleum office
<b>JPP</b>	joint planning process
<b>JRS</b>	joint reporting system
<b>JRTOC</b>	joint rear tactical operations center

<b>J/S</b>	jamming-to-signal
<b>JSCP</b>	joint strategic capabilities plan
<b>JSOAC</b>	joint special operations air component
<b>JSP</b>	joint signal processor
<b>JSPS</b>	Joint Strategic Planning System
<b>JSTAR</b>	joint surveillance target attack radar
<b>JSTPS</b>	joint strategic target planning staff
<b>JTAA</b>	joint action area
<b>JTAGS</b>	joint tactical ground station
<b>JTB</b>	joint transportation board
<b>JTC</b>	joint targeting cell
<b>JTCB</b>	joint targeting coordination board
<b>JTF</b>	joint task force
<b>JTMD</b>	joint theater missile defense
<b>JTMTD</b>	joint theater missile target development
<b>JTN</b>	JTIDS track number
<b>JULLS</b>	Joint Universal Lessons Learned System
<b>JUWTF</b>	joint unconventional warfare task force
<b>KAST</b>	Kalman automatic sequential TMA
<b>KCMX</b>	keyset central multiplexer
<b>LA</b>	lead agent
<b>LAAD</b>	low-altitude air defense
<b>LAADS</b>	low-altitude air defense system
<b>LAAM</b>	light antiaircraft missile
<b>LAAWC</b>	local antiair warfare coordinator (NATO)
<b>LAC</b>	launch area coordinator
<b>LACV</b>	lighter, air cushioned vehicle
<b>LAD</b>	latest arrival date; local air defense; latest arrival date at port of debarkation

<b>LAD/A</b>	low-altitude detection/acquisition
<b>LALC</b>	local air logistic coordinator
<b>LAMPS</b>	Light Airborne Multipurpose System (helicopter)
<b>LANTIRN</b>	low-altitude navigation and targeting infrared for night
<b>LARC</b>	lighter, amphibious resupply, cargo
<b>LASH</b>	lighter aboard ship
<b>LASWC</b>	local antisubmarine warfare commander
<b>LAVA</b>	low-frequency acoustic vernier analyzer
<b>LAW</b>	light assault weapon
<b>LAWS</b>	low-altitude warning system
<b>LBF</b>	linear beamformer
<b>LBR</b>	laser beam rider
<b>LBT</b>	lost beacon track
<b>LBT-TH</b>	lost beacon track-terminal homing
<b>LCAC</b>	landing craft air cushion
<b>LCC</b>	amphibious command ship; land component commander; launch control center; lighterage control center; link communications circuit; logistics component command
<b>LCCS</b>	landing craft control ship
<b>LCD</b>	liquid crystal display
<b>LCM</b>	landing craft, mechanized; life-cycle management; laser countermeasures
<b>LCP</b>	local control panel; launcher control panel
<b>LCT</b>	lighterage control team
<b>LD</b>	line of departure
<b>LDT</b>	large diameter amidships torpedo tubes
<b>LE</b>	linear error
<b>LEA</b>	law enforcement agency
<b>LED</b>	lamp element display
<b>LEDET</b>	law enforcement detachment (USCG)

<b>LEO</b>	law enforcement operations
<b>LEP</b>	linear error probable
<b>LERTCON</b>	alert condition
<b>LEU</b>	law enforcement unit
<b>LEWDD</b>	lightweight early warning detection device
<b>LF</b>	low frequency
<b>LF(A)</b>	low frequency (acoustic)
<b>LFAA</b>	low-frequency active acoustic
<b>LFAIR</b>	low-frequency active intercept receiver
<b>LFBL</b>	low-frequency bottom loss
<b>LFBP</b>	landing force beach party
<b>LFCP</b>	landing force command post
<b>LFR</b>	low-flyer range
<b>LFS</b>	landing force supplies
<b>LFSP</b>	landing force support party
<b>LGM</b>	laser-guided munition
<b>LHA</b>	amphibious assault ship (general purpose); amphibious assault ship (multipurpose); landing helicopter assault
<b>LHC</b>	logistics head coordinator; logistic helicopter coordinator; left-hand circular; local harbor commander
<b>L-hour</b>	landing hour
<b>LI/LO</b>	lock-in/lock-out
<b>LKA</b>	attack cargo ship
<b>LLLGB</b>	low-level laser-guided bomb
<b>LLLTV</b>	low-light level television
<b>LLOA</b>	limiting lines of approach
<b>LLR</b>	low-level radiation
<b>LLSQA</b>	limiting lines of submerged quiet approach
<b>LLTV</b>	low-light television

<b>LMBB</b>	LANT maritime broadcast band
<b>LMCC</b>	logistics movement coordination center
<b>LMO</b>	launch management order
<b>LMS</b>	local monitoring station
<b>LMS-II</b>	Link 11 monitor system
<b>LN</b>	noise level
<b>LNG</b>	liquid natural gas
<b>LNO</b>	liaison officer
<b>LO</b>	low observable
<b>LO/LI</b>	lock-out/lock-in
<b>LO/LO</b>	lift-on/lift-off
<b>LO/RO</b>	lift-on/roll-off
<b>LOA</b>	limit of advance; light-off assessment
<b>LOC</b>	lines of communications; logistics operation center
<b>LOD</b>	light-off detector
<b>LOG</b>	logistics
<b>LOGCONOPS</b>	logistic concept of operations
<b>LOGHELO</b>	logistics helicopter
<b>LOGO</b>	logistics orders
<b>LOGREP</b>	logistics replenishment
<b>LOGREQ</b>	logistics request
<b>LOI</b>	letter of instruction
<b>LOP</b>	line of position; letter of promulgation
<b>LOR</b>	level of repair; likely operational range
<b>LORA</b>	level of repair analysis
<b>LOS</b>	line of sight
<b>LOSS</b>	large object salvage system
<b>LPA</b>	log periodic antenna; low profile antenna

<b>LPD</b>	amphibious transport dock; low probability of detection
<b>LPH</b>	amphibious assault ship; landing platform helicopter
<b>LPI</b>	low probability of intercept
<b>LPI/D</b>	low probability of intercept/detection
<b>LPOC</b>	last port of call
<b>LRASS</b>	launch random access storage set
<b>LRAW</b>	long-range air warfare
<b>LRCB</b>	long-range clutter blanking
<b>LRCU</b>	long-range callup
<b>LRE</b>	launch-and-recovery element
<b>LRF/D</b>	laser range finder/designator
<b>LRI</b>	limited range intercept
<b>LRO</b>	launch and recovery officer
<b>LRS&amp;T</b>	long-range surveillance and tracking
<b>LRSU</b>	long-range surveillance unit
<b>LS</b>	source level; landing site
<b>LSA</b>	logistic sustainability analysis; logic state analyzer
<b>LSB</b>	logistic support base
<b>LSC</b>	logistic support center
<b>LSD</b>	landing ship dock; least significant digit
<b>LSE</b>	landing signal enlisted; logistic support element
<b>LSG</b>	logistic support group
<b>LSMP</b>	logistic support mobilization plan
<b>LSO</b>	landing safety officer; landing signal officer
<b>LSR</b>	laser; logistics support requirement
<b>LSSC</b>	light SEAL (sea-air-land) support craft
<b>LST</b>	landing ship, tank; laser spot tracker; tank landing ship
<b>LSV</b>	logistics support vessel; local sound velocity

<b>LT</b>	large tug; local terminal; long ton
<b>LTA</b>	long-term averaging; long-time average
<b>LTE</b>	launch time earliest
<b>LTEF</b>	launch time earliest feasible
<b>LTG</b>	local tactical grid
<b>LTI</b>	limited technical inspection; long-time integration
<b>LTL</b>	latest time to launch
<b>LTN</b>	local track number
<b>LTP</b>	line throwing projectile; launch time preferred
<b>LTQ</b>	local track quality
<b>LTV</b>	land transport vehicle
<b>LUF</b>	lowest usable frequency
<b>LV</b>	launcher vehicle
<b>LVC</b>	low visible craft
<b>LVS</b>	logistics vehicle system
<b>LWCMS</b>	lightweight company mortar system
<b>LZ</b>	landing zone
<b>LZCO</b>	landing zone control officer
<b>LZCP</b>	landing zone control party
<b>LZT</b>	local zone time
<b>M3</b>	missile mission matching
<b>M/C</b>	mission commander
<b>M/S</b>	minesweeping
<b>M/TDDS</b>	mission/tactical data distribution system
<b>M/V</b>	merchant vessel
<b>MA</b>	motor alternators; mine avoidance; mortuary affairs
<b>MAC</b>	major area commander; minimum altitude capable
<b>MACA</b>	military assistance to civil authorities



<b>MACCS</b>	Marine air command and control system
<b>MACG</b>	Marine air control group
<b>MAD</b>	magnetic anomaly detection
<b>MADMAN</b>	magnetic anomaly detector contact
<b>MADR</b>	maximum alerted detection range
<b>MAE</b>	medium-altitude endurance
<b>MAFC</b>	Marine air-ground task force (MAGTF) all-source fusion center
<b>MAG</b>	Marine aircraft group
<b>MAGIS</b>	Marine air-ground intelligence system
<b>MAGTF</b>	Marine air-ground task force
<b>MAGTF ACE</b>	Marine air-ground task force aviation combat element
<b>MAINT</b>	maintenance
<b>MAIS</b>	maintenance information system
<b>MAL</b>	mine actuation level
<b>MALS</b>	Marine aviation logistics squadron
<b>MAM</b>	maintenance assistance module
<b>MAN</b>	military aviation notice
<b>MANPAD</b>	man-portable air defense
<b>MAP</b>	Medical Augmentation Program
<b>MARAV</b>	master agreement for repair and alterations of vessels
<b>MARDEZ</b>	maritime defense zone
<b>MARDIV</b>	Marine division
<b>MARFOR</b>	Marine Corps forces
<b>MARLO</b>	Marine liaison officer; maritime liaison office
<b>MAROP</b>	marine operators
<b>MARREP</b>	maritime report
<b>MAS</b>	maritime air superiority
<b>MASCAL</b>	mass casualty

<b>MASF</b>	mobile aeromedical staging facility
<b>MASS</b>	Marine air support squadron
<b>MAT</b>	medical analysis tool; mine assembly team; maintenance augmentation team
<b>MATA</b>	military air transportation agreement
<b>MATCALs</b>	Marine air traffic control and landing system
<b>MATCONOFF</b>	materiel control officer
<b>MATE</b>	manual adaptive target motion analysis (TMA) evaluator
<b>MATT</b>	mobile air transport teams
<b>MAU</b>	Marine amphibious unit; maintenance augmenting unit
<b>MAW</b>	Marine aircraft wing
<b>MAX</b>	maximum
<b>MC</b>	mission commander
<b>MC&amp;E</b>	mission control and evaluation
<b>MCA</b>	movement control agency
<b>MCAC</b>	multimission craft air cushion
<b>MCB</b>	mobile construction battalion
<b>MCC</b>	Marine component commander; maritime component commander; master control center; military cooperation committee; military coordinating committee; mission control center; mobility control center; movement control center
<b>MCD</b>	manipulative communications deception; mobile communications detachment
<b>MCDP</b>	Marine Corps doctrinal publication
<b>MCDS</b>	modular cargo delivery system
<b>MCE</b>	mission control element; movement control element
<b>MCG</b>	midcourse command guidance
<b>MCIA</b>	Marine Corps intelligence activity
<b>MCL</b>	maximum climb thrust
<b>MCLLS</b>	Marine Corps lessons learned system
<b>MCM</b>	mine countermeasures; missile control module
<b>MCMRON</b>	mine countermeasures squadron

<b>MCO</b>	movement control officer
<b>MCRP</b>	Marine Corps reference publication
<b>MCS</b>	mine countermeasures support
<b>MCW</b>	minimal care ward
<b>MD</b>	mean absolute deviation
<b>MDA</b>	maritime domain awareness; mine danger area
<b>MDC</b>	missile direction center
<b>MDD</b>	multipurpose data display
<b>MDP</b>	military deception planner
<b>MDR</b>	medium data rate; mean detection range
<b>MDS</b>	message dissemination subsystem; mission design series; maintenance data system; mission distribution system
<b>MDSD</b>	mobile diving and salvage detachment
<b>MDSS</b>	MAGTF deployment support system
<b>MDU</b>	mission data update
<b>MDZ</b>	maritime defense zone; missile danger zone
<b>MEA</b>	maintenance engineering analysis; munitions effectiveness assessment
<b>MEB</b>	Marine expeditionary brigade
<b>MEC</b>	medium endurance cutter; main evaluation center
<b>MED</b>	manipulative electronic deception; medical
<b>MEDLOG</b>	medical logistics
<b>MEDLOGS</b>	medical logistics system
<b>MEDREG</b>	medical regulating
<b>MEE</b>	mission essential equipment
<b>MEPES</b>	medical planning and execution system
<b>MER</b>	multiple ejection rack
<b>MERCO</b>	merchant ship movement and control reporting system; merchant ship control
<b>MEREP</b>	merchant ship report (arrival/departure summary)

<b>MERSHIPS</b>	merchant ships
<b>MES</b>	medical equipment sets
<b>MESS</b>	maximum effective sonar speed
<b>MET</b>	multinational force commander
<b>MEU</b>	Marine expeditionary unit
<b>MEU(SOC)</b>	Marine expeditionary unit (special operations capable)
<b>MEZ</b>	missile engagement zone
<b>MF</b>	medium frequency; mobile facility; multifrequency
<b>MFA</b>	medium-frequency acoustic
<b>MFACC</b>	multinational force air component commander
<b>MFC</b>	missile fire control
<b>M-FLAD</b>	multiflexible analysis and display
<b>MFP</b>	mission folder package
<b>MFPF</b>	minefield planning folder
<b>MFR</b>	memorandum for the record
<b>MGB</b>	medium girder bridge
<b>MGMT</b>	management
<b>MGR</b>	manager
<b>MHN</b>	moving haven
<b>MHQ</b>	maritime headquarters
<b>MHRS</b>	magnetic heading reference system
<b>MIA</b>	missing in action
<b>MIC</b>	materiel identification and control; maritime interception commander
<b>MIF</b>	missile in-flight
<b>MIFC</b>	maritime intelligence fusion center
<b>MIG</b>	metal-inert gas
<b>MIJI</b>	meaconing, interference, jamming, and intrusion
<b>MIL</b>	magnetic indicator loop

<b>MILC</b>	mine-like contact
<b>MILCOM</b>	military communications
<b>MILDEC</b>	military deception
<b>MILOGS</b>	Marine integrated logistics system
<b>MILOPS</b>	military operations
<b>MILSATCOM</b>	military satellite communications
<b>MILSBILLS</b>	military standard billing system
<b>MILSPEC</b>	military specifications
<b>MILSTAMP</b>	military standard transportation and movement procedure
<b>MILSTEP</b>	military standard supply and transportation evaluation procedure
<b>MILSTRAP</b>	military standard transaction reporting and accounting procedure
<b>MIMMS</b>	marine integrated maintenance management system
<b>MIN-RAD</b>	minimum radiation
<b>MIO</b>	maritime interception operations; maritime interdiction operation
<b>MIOC</b>	maritime intercept operations commander
<b>MIPR</b>	military interdepartmental purchase request
<b>MIPS</b>	million instructions per second
<b>MIS</b>	missile identification system
<b>MIST</b>	multiple input sensor terminal
<b>MITAC</b>	map interpretation and terrain analysis course
<b>MIWC</b>	mine warfare commander
<b>MIZ</b>	marginal ice zone
<b>ML</b>	mixed layer
<b>MLA</b>	missile launch assembly
<b>MLB</b>	mobile logistics support base
<b>MLD</b>	mixed layer depth
<b>MLE</b>	maritime law enforcement; maximum likelihood estimation; maritime law enforcement

<b>ML-N</b>	management list-Navy
<b>MLO</b>	material liaison office
<b>MLSF</b>	mobile logistic support force
<b>MLSG</b>	mobile logistic support group
<b>MLSR</b>	missing, lost, stolen, or recovered (government property report)
<b>MLW</b>	mean low water
<b>MIWC</b>	mine warfare coordinator
<b>MM</b>	multinational manual
<b>MMA</b>	moored mine avoidance
<b>MMART</b>	mobile medical augmentation readiness team
<b>MMD</b>	mission media device
<b>MME</b>	manual modified entries
<b>MMF</b>	multinational maritime force; mobile maintenance facility
<b>MMFC</b>	multinational maritime force commander
<b>MML</b>	master mission library
<b>MMOP</b>	multinational maritime operation
<b>MMP</b>	missile monitor power
<b>MMS</b>	mission management system; marine mammal system
<b>MMSD</b>	mass memory storage device
<b>MMU</b>	memory module unit
<b>MN</b>	Mach number
<b>MNL</b>	minimum noise level
<b>MNLC</b>	multinational logistic commander
<b>MNMF</b>	multinational maritime force
<b>MNS</b>	mine neutralization system
<b>MNT</b>	manual new threat
<b>MOA</b>	military operations area; memorandum of agreement
<b>MOBOARD</b>	maneuvering board

<b>MOD</b>	modification
<b>MODE</b>	transportation mode
<b>MODLOC</b>	modified location
<b>MODORD</b>	modified order
<b>MOE</b>	MAD operational effectiveness
<b>MOMAD</b>	mobile mine assembly detachment
<b>MOMAG</b>	mobile mine assembly group
<b>MOMAU</b>	mobile mine assembly unit
<b>MOPP</b>	mission-oriented protective posture
<b>MOS</b>	military occupational specialty
<b>MOSS</b>	mobile submarine simulator
<b>MOT</b>	middle of target
<b>MOVLAS</b>	manually operating visual landing aid system
<b>MOVORD</b>	movement order
<b>MP</b>	mission package
<b>MPA</b>	maritime patrol aircraft; mission and payload assessment; mission planning agent
<b>MPC</b>	multipurpose console
<b>MPDS</b>	message processing data system; message processing distribution system (shipboard)
<b>MPE/S</b>	maritime prepositioned equipment and supplies
<b>MPF</b>	maritime prepositioning force
<b>MPFIO</b>	maritime prepositioning force independent operation
<b>MPFM</b>	maritime prepositioning force module
<b>MPI</b>	mission planning instructions
<b>MPMF</b>	multipulse multifrequency
<b>MPN</b>	memory process number
<b>MPR</b>	maritime patrol and reconnaissance
<b>MPS</b>	maritime prepositioning ships; main propulsion system
<b>MPSRON</b>	maritime prepositioning ships squadron

<b>MPUAS</b>	medical personnel unit augmentation system
<b>MRA</b>	maximum response axis
<b>MRAAW</b>	medium-range antiair warfare
<b>MRASM</b>	medium-range air-to-surface missile
<b>MRAW</b>	medium-range air warfare
<b>MRB</b>	master reference buoy
<b>MRC</b>	major regional conflict
<b>MRCC</b>	movement report control center
<b>MRCM</b>	medium-range cruise missiles
<b>MRE</b>	meals, ready to eat
<b>MRF</b>	mobile riverine force
<b>MRIL</b>	master repairables index listing
<b>MRL</b>	maritime rear link
<b>MRLS</b>	multiple rocket launcher system
<b>MRMS</b>	maintenance resource management system
<b>MRN</b>	medical regulating net
<b>MRNG</b>	minimum range
<b>MRO</b>	movement report officer
<b>MRP</b>	maintenance of real property
<b>MRR</b>	minimum-risk route
<b>MRS</b>	maximum range search; medical regulating system
<b>MRT</b>	military rated thrust
<b>MRU</b>	minimum replacement unit
<b>MS</b>	master station
<b>MSCMR</b>	MSC movement report
<b>MSD</b>	material support date; mine search detachment
<b>MSE</b>	mission support element; mobile subscriber equipment
<b>MSFZ</b>	missile seeker zone of fire



<b>MSG</b>	mobile support group
<b>MSK</b>	minimum shift keying
<b>MSL</b>	modified surf limit; mean sea level
<b>MSN</b>	memory sequence number; message serial number
<b>MSO</b>	master station operator
<b>MSOC</b>	medical support operations center
<b>MSOS</b>	mass storage operating system
<b>MSP</b>	multistatic processor; mobile sensor platform
<b>MSPF</b>	maritime special purpose force
<b>MSR</b>	main supply route; mission support request
<b>MSS</b>	mission support system; minehunting sonar set
<b>MSSG</b>	MEU service support group
<b>MST</b>	mobile support team; Marine expeditionary force (MEF) weather support team; mission support team; maintenance support team
<b>MSU</b>	mine search unit
<b>MTA</b>	manual track association
<b>MTB</b>	maintenance of true bearing
<b>MTBO</b>	mean time between overhaul
<b>MTF</b>	main track file
<b>MTL</b>	master training list
<b>MTMC</b>	military traffic management command
<b>MTMTS</b>	Military Traffic Management and Terminal Service
<b>MTN</b>	multi-tactical data link network
<b>MTO</b>	message to observer; maritime tasking order; mission type order
<b>MTOT</b>	missile time on target; mean time on target
<b>MTR</b>	motor; minimum tracking range; mandatory turn-in repairable
<b>MTST</b>	maneuvering target statistical tracker
<b>MTT</b>	magnetic tape transport; maritime target track; mobile training team

<b>MTTR</b>	mean time to repair
<b>MTU</b>	magnetic tape unit; mobile test unit
<b>MTV</b>	moving target video; marginal terrain vehicle
<b>MUSE</b>	mobile utilities support equipment
<b>MUX</b>	multiplex
<b>MV</b>	merchant vessel; motor vessel
<b>MVAR</b>	magnetic variation
<b>MVI</b>	mission verification index
<b>MW</b>	mine warfare
<b>MWB</b>	motor whaleboat
<b>MWP</b>	mine warfare pilot
<b>MWSG</b>	Marine wing support group
<b>MXA</b>	mobile exercise area
<b>N4</b>	logistics staff officer
<b>NAC</b>	normal approach course
<b>NADEP</b>	naval aircraft depot
<b>NAESU</b>	naval aviation electronics service unit; naval aviation engineering service unit
<b>NAF</b>	naval air facility; nonappropriated funds; numbered air force
<b>NALC</b>	naval ammunition logistic code; naval ammunition logistics code
<b>NALE</b>	naval and amphibious liaison element
<b>NALO</b>	Navy air logistics office
<b>NALSS</b>	naval advanced logistic support site
<b>NAMP</b>	naval aviation maintenance program
<b>NAMTO</b>	Navy material transportation office
<b>NAOMIS</b>	Navy Material Transportation Office Operations Management Information System
<b>NAP</b>	Navy all-purpose (Nozzle); naval aviation plan
<b>NAR</b>	no action required
<b>NARAD</b>	naval research and development

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<b>NAS</b>	naval air station
<b>NATCO</b>	Navy air traffic coordinating officer
<b>NATDS</b>	Navy automated transportation data system
<b>NATEC</b>	Naval Air Technical Data and Engineering Service Command
<b>NATIS</b>	naval air training information
<b>NATOPS</b>	naval air training and operating procedures standardization
<b>NAU</b>	noise augmentation unit
<b>NAV</b>	navigation; navigational; navigator
<b>NAVAID</b>	navigation aid
<b>NAVAVNDEPOT</b>	naval aviation depot
<b>NAVBEACHGRU</b>	naval beach group
<b>NAVCALS</b>	naval communication area local station
<b>NAVCAMS</b>	naval communications area master station
<b>NAVCERT</b>	navigation certification
<b>NAVCIRT</b>	naval computer incident response team
<b>NAVCM</b>	navigation countermeasures
<b>NAVCOMMAREA</b>	naval communications area
<b>NAVCOMMFAC</b>	naval communications facility
<b>NAVCOMMU</b>	naval communications unit
<b>NAVCOMSTA</b>	naval communications station
<b>NAVEX</b>	navigation exercise
<b>NAVFAC</b>	Naval Facilities Engineering Command; naval facility
<b>NAVFLIR</b>	Naval aircraft flight record; navigation forward looking infrared
<b>NAVFOR</b>	Navy forces
<b>NAVICP</b>	naval inventory control point
<b>NAVMC</b>	Navy/Marine departmental publication
<b>NAVMEDLOGCOM</b>	Navy Medical Logistical Command
<b>NAVNET</b>	navigation network

<b>NAVOSH</b>	Navy occupational safety and health
<b>NAVPLOT</b>	navigation plot
<b>NAVPTO</b>	Navy passenger transportation office
<b>NAVSAT</b>	navigation satellite
<b>NAVSEACARCOR</b>	Navy sea cargo coordinator
<b>NAVSPECWAR</b>	naval special warfare
<b>NAVSTA</b>	naval station
<b>NAVSTAR</b>	navigation system using timing and range
<b>NAVSUP</b>	naval supply; Naval Supply Systems Command
<b>NAVTEX</b>	navigation information telex
<b>NB</b>	narrowband
<b>NBC</b>	nuclear, biological, and chemical; nonbattle casualty
<b>NBG</b>	naval beach group
<b>NBSV</b>	narrowband secure voice
<b>NCA</b>	National Command Authorities
<b>NCAGS</b>	naval cooperation and guidance for shipping
<b>NCAP</b>	night combat air patrol
<b>NCAPS</b>	Naval control and protection of shipping
<b>NCASW</b>	network-centric antisubmarine warfare
<b>NCB</b>	net control block; naval construction brigade; noncompliant boarding
<b>NCC</b>	naval component commander; Navy component command; network control center; North American Aerospace Defense Command (NORAD) Command Center
<b>NCCS</b>	Navy command and control system
<b>NCCSA</b>	Navy command and control system ashore
<b>NCEA</b>	noncombat expenditure allocation
<b>NCF</b>	naval construction force
<b>NCFSU</b>	naval construction force support unit
<b>NCHB</b>	Navy cargo handling battalion

<b>NCHF</b>	Navy cargo handling force
<b>NCMP</b>	Navy capabilities and mobilization plan
<b>NCO</b>	network centric operations; noncombat operations; noncommissioned officer; net control officer
<b>NCR</b>	naval construction regiment
<b>NCS</b>	Naval communications station
<b>NCSO</b>	naval control of shipping office
<b>NCSORG</b>	naval control of shipping organization
<b>NCT</b>	net cycle time
<b>NCTAMS</b>	naval computer and telecommunications area master station
<b>NCTR</b>	noncooperative target recognition (USMC)
<b>NCTS</b>	naval computer and telecommunications station
<b>NCW</b>	naval coastal warfare
<b>NCWA</b>	naval coastal warfare area
<b>NCWC</b>	naval coastal warfare commander
<b>NCWGRU</b>	naval coastal warfare group
<b>NDB</b>	nondirectional bearing; nuclear depth bomb
<b>NDP</b>	naval doctrine publication
<b>NEAT</b>	naval embarked advisory team
<b>NEC</b>	naval exercise coordinator
<b>NELSF</b>	naval expeditionary logistic support force
<b>NEMVAC</b>	noncombatant emergency and evacuation plan
<b>NEO</b>	noncombatant evacuation operation
<b>NERF</b>	naval emitter reference file
<b>NET</b>	network
<b>NEU</b>	neutral
<b>NEURS</b>	Navy energy usage reporting system
<b>NEW</b>	naval expeditionary warfare; net explosive weight

<b>NEWCON</b>	new construction
<b>NFA</b>	no-fire area
<b>NFAF</b>	Naval Fleet Auxiliary Force
<b>NFCS</b>	Navy field contracting system
<b>NFE</b>	no further entries; not fully equipped
<b>NFL</b>	no-fire line
<b>NFLIR</b>	navigation forward-looking infrared
<b>NFLS</b>	naval forward logistic site
<b>NFM</b>	figure of merit
<b>NFO</b>	naval flight officer
<b>NFZ</b>	no-fly zone; nonfiring zone
<b>NGF</b>	naval gun fire
<b>NGFEX</b>	naval gunfire exercise
<b>NGFO</b>	naval gunfire officer
<b>NGFS</b>	naval gunfire support
<b>NGLO</b>	naval gunfire liaison officer
<b>NGLT</b>	naval gunfire liaison team
<b>NGO</b>	nongovernmental organization
<b>NGSC</b>	naval gunnery strike coordinator
<b>NIB</b>	not-to-interfere basis
<b>NIIN</b>	national item identification number
<b>NIIP</b>	Navy instructional input program
<b>NILO</b>	naval intelligence liaison officer
<b>NIMSR</b>	nonconsumable item materiel support request
<b>NIP</b>	notice of intelligence potential
<b>NIPRNET</b>	non-secure internet protocol router network
<b>NIS</b>	noninterest signal
<b>NIST</b>	national intelligence support team

<b>NIU</b>	navigation interface unit
<b>NIXIE</b>	towed electromagnetic broadband noisemaker
<b>NKP</b>	navigation keyboard printer
<b>NL</b>	noise level
<b>NLGC</b>	noise-limiting gain control
<b>NLLDB</b>	Navy lessons learned database
<b>NLLS</b>	Navy lessons learned system
<b>NLT</b>	nonlethal technology; not later than
<b>NMC</b>	not mission capable
<b>NMCB</b>	naval mobile construction battalion
<b>NMCS</b>	nonmission capable supply
<b>NMEF</b>	naval mine engineering facility
<b>NMET</b>	Navy mission-essential task
<b>NMETL</b>	Navy mission-essential task list
<b>NMPS</b>	naval mobilization processing sites
<b>NMR</b>	no maintenance requirement
<b>NNPI</b>	nuclear propulsion plant information
<b>NNPS</b>	nuclear propulsion plant space
<b>NOACT</b>	Navy overseas air cargo terminal
<b>NOB</b>	Naval order of battle
<b>NOC</b>	network operations center
<b>NODLR</b>	NOD-long range
<b>NOI</b>	notice of intention
<b>NOMBO</b>	nonmine bottom object
<b>NOME</b>	nonmine mine-like echo
<b>NONUM</b>	notional number
<b>NOP</b>	navigation operating procedure
<b>NOPF</b>	naval ocean processing facility

<b>NOR</b>	not operationally ready
<b>NORATS</b>	Navy operational radio and telephone switchboard
<b>NORDO</b>	no radio; no-radio aircraft
<b>NORM</b>	Navigation Organization and Regulations Manual
<b>NORS</b>	not operationally ready supply
<b>NOS</b>	network operating system; normal operating state; night observation system
<b>NOTAM</b>	notice to airmen
<b>NOTMAR</b>	notice to mariners
<b>NOTS</b>	near-surface ocean thermal structure
<b>NPE</b>	Navy preliminary evaluation
<b>NPLG</b>	night plane landing guard
<b>NPNF</b>	no point no fire
<b>NPT</b>	nonparticipant
<b>NRC</b>	National Response Center; nonunit-related cargo
<b>NRCEP</b>	naval reserve contingency engineering program
<b>NRCHB</b>	naval reserve cargo handling battalion
<b>NRCHTB</b>	naval reserve cargo handling training battalion
<b>NRD</b>	recognition differential
<b>NRDT</b>	true recognition differential
<b>NRECCO</b>	long-range airborne search unit, night
<b>NRFI</b>	not ready for issue
<b>NROSS</b>	Navy remote ocean sensing system
<b>NRPF</b>	naval regional processing facility
<b>NRS</b>	nominal receiving sensitivity
<b>NRT</b>	normal rated thrust
<b>NRTI</b>	near real-time intelligence
<b>NRZ</b>	no-radiate zone
<b>NRZP</b>	no-radiate zone profiles



## **NTRP 1-02**

<b>NSA</b>	naval support activity
<b>NSD</b>	naval supply depot; national sensor data; nonself-destruct
<b>NSDA</b>	non self-deployable aircraft
<b>NSE</b>	national support element; Navy support element; naval support element
<b>NSF</b>	naval surface fire; naval support facility
<b>NSFS</b>	naval surface fire support
<b>NSIU</b>	navigation switching interface unit
<b>NSL</b>	no-strike list
<b>NSMP</b>	Navy support and mobilization plan
<b>NSN</b>	national stock number
<b>NSNS</b>	Navy satellite navigation system
<b>NSOF</b>	Navy status of forces
<b>NSP</b>	NCAGS shipping point
<b>NSSB</b>	Navy supply support battalion
<b>NSSC</b>	near-surface sound channel
<b>NSSF</b>	naval submarine support facility
<b>NSTM</b>	Naval Ships Technical Manual
<b>NSW</b>	naval special warfare
<b>NSWG</b>	naval special warfare group
<b>NSWTG</b>	naval special warfare task group
<b>NSWTU</b>	naval special warfare task unit
<b>NTACS</b>	Navy tactical air control system
<b>NTCS-A</b>	Navy Tactical Command System Afloat
<b>NTDC</b>	non-tactical data collection
<b>NTDS</b>	naval tactical data system
<b>NTF</b>	new track file
<b>NTS</b>	naval telecommunication system; night targeting system
<b>NTSB</b>	National Transportation Safety Board

<b>NTSS</b>	national time-sensitive data system
<b>NTTP</b>	Navy tactics, techniques, and procedures
<b>NTU</b>	new threat upgrade
<b>NUFEA</b>	Navy unique fleet essential aircraft
<b>NUSUM</b>	nuclear detonation summary
<b>NUWEDS</b>	nuclear weapons emergency destruct system
<b>NVD</b>	night vision device
<b>NVG</b>	night vision goggle
<b>NVM</b>	noise and vibration monitor
<b>NVMS</b>	noise and vibration monitoring subsystem
<b>NVP</b>	night vision periscope
<b>NVR</b>	naval vessel register
<b>NWB</b>	normal wideband
<b>NWEL</b>	Navy Warfare Electronic Library
<b>NWL</b>	naval weapons laboratory; Navy Warfare Library
<b>NWP</b>	naval warfare publication; numerical weather prediction
<b>NWPL</b>	naval warfare publication library
<b>NWS</b>	naval weapons station
<b>NWTDB</b>	Navy warfare tactical database
<b>O&amp;M</b>	operation and maintenance
<b>O&amp;MN</b>	operations and maintenance, Navy (funding)
<b>O/M</b>	oceanography/meteorology
<b>O/S</b>	over-the-side
<b>O/T</b>	omni track
<b>OA</b>	objective area; operating assembly; operational area; operations aerology shipboard METOC division
<b>OAB</b>	outer air boundary; outer air battle
<b>OAD</b>	operational availability date; optimum approach course

<b>OAG</b>	operations advisory group
<b>OAP</b>	off-axis penalty; offset aimpoint
<b>OAR</b>	ORDALT accomplishment requirement
<b>OARS</b>	ocean area reconnaissance satellite
<b>OAS</b>	offensive air support; Organization of American States
<b>OASIS</b>	ocean all-source information system
<b>OAT</b>	outside air temperature
<b>OBA</b>	oxygen breathing apparatus
<b>OBE</b>	overtaken by events
<b>OBFS</b>	offshore bulk fuel system
<b>OBP</b>	onboard processor
<b>OBT</b>	onboard trainer
<b>OCA</b>	offensive counterair; operational control authority
<b>OCCA</b>	Ocean Cargo Clearance Authority
<b>OCE</b>	officer conducting the exercise
<b>OCO</b>	offload control officer
<b>OCR</b>	operational change report
<b>OCU</b>	offload control unit
<b>OD</b>	optical density
<b>O-Day</b>	offload day
<b>ODD</b>	offboard deception device
<b>ODO</b>	operations duty officer
<b>ODR</b>	observed detection range
<b>ODT</b>	omni-directional transmission
<b>ODZ</b>	outer defense zone
<b>OEBGD</b>	overseas environmental baseline guidance document
<b>OEG</b>	operations evaluation group; operational exposure guidance
<b>OEO</b>	officers' eyes only

<b>OF/WST</b>	operational flight/weapons system trainer
<b>OFA</b>	order for assignment; ocean frontal analysis
<b>OFE</b>	ordered for engagement
<b>OFFSHR</b>	offshore (followed by geographic location indicated)
<b>OFT</b>	operational flight trainer
<b>OG</b>	operational guide
<b>OGE</b>	out-of-ground effect
<b>OH</b>	operational handbook
<b>OIC</b>	officer in charge
<b>OICC</b>	officer-in-charge of construction
<b>OL</b>	operational library; on-line
<b>OLF</b>	outlying field
<b>OLM</b>	ordnance logistics management
<b>OLS</b>	optical landing system; operational linescan system; on-line sizing
<b>OMA</b>	operational (organizational) maintenance activity
<b>OMC</b>	one-man control
<b>OMD</b>	operations maintenance department
<b>OMEGA</b>	long-range navigational system
<b>OMFTS</b>	operational maneuver from the sea
<b>OMMS</b>	organizational maintenance management system
<b>OMNI</b>	omnidirectional
<b>OOA</b>	out of action; out of area
<b>OOB</b>	order of battle
<b>OOC</b>	out of commission
<b>OOD</b>	officer of the deck; officer of the day
<b>OOS</b>	out of service
<b>OP</b>	observation position; observation post; operational publication (USN); ordnance pamphlet; ordnance publication; overpressure charges

<b>OPAREA</b>	operating area
<b>OPCEN</b>	operations center (USCG)
<b>OPCOM</b>	operational command
<b>OPCON</b>	operational control
<b>OPCONCEN</b>	operational control center
<b>OPDEC</b>	operational deception
<b>OPDIR</b>	operational directive
<b>OPDS</b>	offshore petroleum discharge system (Navy)
<b>OPDS/IPDS</b>	offshore/inshore petroleum distribution systems
<b>OPELINT</b>	operational electronic intelligence
<b>OPEVAL</b>	operational evaluation
<b>OPFOR</b>	opposing force; opposition force
<b>OPG</b>	operations planning group
<b>OPGEN</b>	operational general; general operations message; operation general matter
<b>OPINTEL</b>	operational intelligence
<b>OPLAN</b>	operation plan; operational plan
<b>OPN</b>	other procurement, Navy (funding)
<b>OPNOTE</b>	operator note; operational notice
<b>OPORD</b>	operation order; operational order
<b>OPORPL</b>	oppose(d) replenishment
<b>OPOSENT</b>	oppose(d) entry
<b>OPP</b>	offload preparation party
<b>OPPE</b>	operational propulsion plant examination
<b>OPR</b>	office of primary responsibility
<b>OPREP</b>	operational report
<b>OPS</b>	operations
<b>OPSEC</b>	operations security
<b>OPSTAT</b>	operational status (message format)

<b>OPSUM</b>	operations summary
<b>OPTAR</b>	operating target
<b>OPTASK</b>	operation task; operation task (message); operational tasking
<b>OPTASK AMPHIB</b>	operational tasking amphibious
<b>OPTASKLINK</b>	operational tasking data link
<b>OPTEMPO</b>	operating tempo; operational tempo
<b>OPTINT</b>	optical intelligence
<b>OR</b>	operational requirement; operating room
<b>ORBAT</b>	order of battle
<b>ORD</b>	ordnance
<b>ORDALT</b>	ordnance alteration
<b>ORDCAL</b>	ordnance calibration
<b>ORDN</b>	ordnance
<b>ORD REV</b>	ordnance procedures review
<b>ORDSER</b>	ordnance support element review
<b>ORE</b>	operational readiness evaluation; officer responsible for the exercise
<b>ORESTES</b>	intrabattle group tactical HF circuit
<b>ORI</b>	operational readiness inspection
<b>ORM</b>	operational risk management
<b>ORP</b>	ocean reception point
<b>ORS</b>	offensive radar set
<b>ORSE</b>	operational reactor safeguard exams
<b>ORT</b>	operational readiness test
<b>OSA</b>	operational support aircraft
<b>OSC</b>	on-scene commander; operational support command; operations support center
<b>OSE</b>	on-scene endurance
<b>OSG</b>	operational swimmer group
<b>OSI</b>	open system interconnection; operating space item

<b>OSID</b>	offshore infrastructure defense
<b>OSINT</b>	open-source intelligence
<b>OSIS</b>	ocean surveillance information system
<b>OSMOSS</b>	own ship motion simulation system
<b>OSMP</b>	ocean surveillance master plan
<b>OSP</b>	ocean surveillance product
<b>OSR</b>	optimum sonar routing
<b>OSS</b>	ocean surveillance system; operations support system; optical sighting system
<b>OST</b>	operational support team
<b>OSV</b>	ocean station vessel
<b>OT</b>	operational test; operational testing; observer target; operational test
<b>OT&amp;E</b>	operational test and evaluation
<b>OTAI</b>	over-the-air initialization
<b>OTAR</b>	over-the-air rekey
<b>OTAT</b>	over-the-air transmission; over-the-air transfer
<b>OTB</b>	observer target bearing
<b>OTC</b>	officer in tactical command; over the counter
<b>OTCIXS</b>	officer in tactical command information exchange system
<b>OTF</b>	one-time-correlated track file
<b>OTG</b>	operations and tactics guide
<b>OTH</b>	other; over the horizon
<b>OTHT</b>	over-the-horizon targeting
<b>OTL</b>	observer target line; operational test launch
<b>OTO</b>	operator-to-operator
<b>OTP</b>	one-time pad
<b>OTPI</b>	on-top position indicator
<b>OTS</b>	over the shoulder
<b>OTSR</b>	optimum track shipping

<b>OTST</b>	over-the-side torpedo
<b>OUB</b>	OPDS utility boat
<b>OUT</b>	onboard trainer
<b>P&amp;E</b>	planning and estimating
<b>P3</b>	compressor discharge pressure
<b>P3I</b>	preplanned product improvement
<b>P/C</b>	pleasure craft
<b>P/D</b>	periscope depth
<b>P/M/C</b>	passengers/mail/cargo
<b>P/N</b>	part number
<b>P/S</b>	port/starboard
<b>P/U</b>	participating unit
<b>PA</b>	public affairs; pulse amplitude
<b>PAC</b>	preaction calibration; passive acoustic classification
<b>PACE</b>	passive acoustic communication equipment
<b>PACQ</b>	probability of acquisition
<b>PACQA</b>	probability of acquisition actual
<b>PADC</b>	passive acoustic detection and classification
<b>PAIR</b>	performance and integration retrofit
<b>PALS</b>	positioning and locating system; precision approach landing system
<b>PALT</b>	procurement administrative lead time
<b>PAO</b>	public affairs office; public affairs officer
<b>PAPL</b>	passive acoustic propagation loss
<b>PAR</b>	precision approach radar; pulsed acquisition radar
<b>PARENTSQ</b>	parent squadron base
<b>PASEP</b>	passed separately
<b>PATRIOT</b>	phased array tracking radar intercept on target
<b>PATRON</b>	patrol squadron (Navy)



<b>PAVG</b>	average output power
<b>PAX</b>	passenger(s); public affairs plans; transfer of personnel
<b>PB</b>	particle beam; patrol boat; President's budget
<b>PBB</b>	passive bottom bounce; passive broadband
<b>PBC</b>	practice bomb container
<b>PBRT</b>	priority band recycle time
<b>PBT</b>	phase bearing tracker
<b>PC</b>	personal computer; patrol coastal; patrol craft
<b>PCA</b>	positive control airspace
<b>PCD</b>	precision course director
<b>PCM</b>	pulse code modulation
<b>PCO</b>	primary control officer
<b>PCP</b>	penetration control point
<b>PCS</b>	permanent change of station; portable control station; position, course, and speed; primary control ship
<b>PCSP</b>	peculiar contingency support package
<b>PCU</b>	power converter unit
<b>PCW</b>	pulsed continuous wave
<b>PD</b>	periscope depth; program directive; probability of damage; pulse duration; priority designator
<b>Pd</b>	detection probability; probability of detection
<b>PD/D</b>	point detonating/delay
<b>PDA</b>	personal digital assistant; periscope depth attack
<b>PDC</b>	Practice depth charge; processing display channel
<b>PDF</b>	processed directional transmission; point detonating fuze; principal direction of fire
<b>PDIT</b>	preflight data insertion tape
<b>PDM</b>	pulse duration modulation
<b>PDPC</b>	post-detection pulse compression
<b>PDR</b>	precision data recorder; predicted detection range; periscope depth range

<b>PDS</b>	passive detection system
<b>PDT</b>	processed directional transmission; pulse Doppler tracking
<b>PDTC</b>	professional development and training conference
<b>PDTW</b>	professional development and training workshop
<b>PDU</b>	protocol data unit; power distribution unit
<b>PDW</b>	personal defense weapon
<b>PE</b>	peace enforcement; peacetime establishment; personal effects; program element
<b>PEC</b>	program element code
<b>PEE</b>	pressure environmental equipment
<b>PEETE</b>	portable electrical (electronic) test equipment requirements list
<b>PEH</b>	probable error in height of burst
<b>PEL</b>	preferred evasion locale
<b>PEM</b>	priority engage missile; program element monitor
<b>PEO</b>	peace enforcement operation(s); program executive office
<b>PEP</b>	peak envelope power
<b>PERA</b>	planning and engineering for repairs and alterations
<b>PERSTEMPO</b>	personnel tempo
<b>PEZ</b>	patriot engagement zone
<b>PFD</b>	personal flotation device
<b>PFE</b>	post fire evaluation
<b>PFID</b>	positive friendly identification
<b>PFLOLS</b>	portable Fresnel-lens optical landing system
<b>PFM</b>	pulse frequency modulation
<b>PFOM</b>	passive figure of merit
<b>PFPS</b>	portable flight planning system
<b>PG</b>	patrol gunboat
<b>PGC</b>	programmable gain control
<b>PGG</b>	pulse group generation

<b>PGM</b>	precision-guided munitions
<b>PGSE</b>	peculiar ground support equipment
<b>PH</b>	probability of a hit
<b>PHIBCB</b>	amphibious construction battalion
<b>PHIBGRU</b>	amphibious group
<b>PHIBLEX</b>	amphibious exercise
<b>PHIBOP</b>	amphibious operation
<b>PHIBRON</b>	amphibious squadron
<b>PHID</b>	positive hostile identification
<b>PHIT</b>	probability of hit
<b>PHITAR</b>	predesignated high-interest tactical area
<b>PHM</b>	patrol combatant (hydrofoil)
<b>PHOTEX</b>	day photographic exercise
<b>PHOTINT</b>	photographic intelligence
<b>PHP</b>	predicted hit point
<b>PHST</b>	packaging, handling, storage, and transportation
<b>PI/DE</b>	passive identification/direction equipment
<b>PIA</b>	planned incremental availability
<b>PIC</b>	parachute insertion capable
<b>PICA</b>	primary inventory control activity
<b>PID</b>	positive identification
<b>PIF</b>	personal identification feature
<b>PIM</b>	position and intended movement; point of intended movement; plan of intended movement
<b>PINS</b>	precise integrated navigation system
<b>PIO</b>	pilot-induced oscillation
<b>PIP</b>	predicted intercept point
<b>PIR</b>	priority intelligence requirement

<b>PIRAZ</b>	positive identification radar advisory zone
<b>PIREP</b>	pilot report
<b>PIRID</b>	passive infrared intrusion detector
<b>PIRR</b>	prepositioned war reserve interrogation and readiness reporting (system)
<b>PIW</b>	person in (the) water
<b>PIZ</b>	permanent ice zone
<b>PK</b>	position keeping; probability of kill; peacekeeping
<b>PKG-POL</b>	packaged petroleum, oils, and lubricants
<b>PKI</b>	public key infrastructure
<b>PKM</b>	patrol killer medium
<b>PKO</b>	peacekeeping operations
<b>PKP</b>	purple k powder
<b>PKSS</b>	single shot probability of kill
<b>PL</b>	phase line; propagation loss; pulse length
<b>PLA</b>	plain language address
<b>PLAD</b>	plain language address designator
<b>PLANEX</b>	planning exercise
<b>PLE</b>	prudent limit of endurance
<b>PLI</b>	position location information
<b>PLP</b>	preferred launch position
<b>PLRS</b>	position location reporting system
<b>PLS</b>	personal locator system
<b>PM</b>	phase modulation; preventive maintenance; program manager; performance monitoring; phase modulation; preventive maintenance
<b>PMA</b>	phased maintenance availability
<b>PMC</b>	partial mission capable; passenger/mail/cargo
<b>PMCC</b>	passengers/mail/cargo coordinator
<b>PMCS</b>	partial mission capable supply

<b>PME</b>	professional military education; performance measuring equipment
<b>PMG</b>	permanent magnetic generator
<b>PMI</b>	passive mode inhibit; patient movement items; prevention of mutual interference; primary movement items
<b>PMIDB</b>	photo miniaturized intelligence database
<b>PML</b>	program manager, logistics; personal marker light
<b>PMOR</b>	process measures of readiness system
<b>PMP</b>	parallel motion protractor
<b>PMR</b>	postmission reports; planned maintenance requirement
<b>PMS</b>	planned maintenance system; preventive maintenance system
<b>PNB</b>	precise navigation buoy
<b>PNS</b>	precise navigation system
<b>PO</b>	peace operations
<b>POA&amp;M</b>	plan of action and milestones
<b>POB</b>	persons on board; psychological operations battalion
<b>POC</b>	point of contact
<b>POCG</b>	port operations control group (USMC)
<b>POD</b>	plan of the day; port of debarkation; probability of detection; print on demand
<b>POE</b>	port of embarkation; port of entry; planned operational environment; projected operational environment
<b>POF</b>	point of fire
<b>POG</b>	port operations group
<b>POI</b>	probability of intercept
<b>POIC</b>	petty officer in charge
<b>POL</b>	petroleum, oil(s), and lubricants
<b>POM</b>	program objective memorandum
<b>POMCUS</b>	prepositioning of materiel configured to unit sets
<b>POMI</b>	plans, operations, and medical intelligence officer
<b>POMSO</b>	Plans, Operations, and Military Support Office(r) (NG)

<b>POP</b>	performance-oriented packaging; port opening package
<b>POS</b>	primary operating stock(s); peacetime operating stocks; port of support; position; probability of success
<b>POSSNV</b>	possible nonvehicle
<b>POSSUB</b>	possible submarine
<b>POTS</b>	plain old telephone system
<b>POW</b>	prisoner of war
<b>PP&amp;O</b>	plans, policies, and operations
<b>PPC</b>	power projection cell
<b>PPD</b>	pounds per day
<b>PPI</b>	plan position indicator
<b>PPL</b>	protocol processing unit
<b>PPR</b>	preplanned response
<b>PPS</b>	precise positioning system; pulses per second
<b>PPV</b>	public-private venture
<b>PQS</b>	personnel qualification standards
<b>PR</b>	personnel recovery
<b>PRA</b>	primary review authority; probability of raid annihilation
<b>PRC</b>	port readiness committee
<b>PRECOM</b>	precommissioning
<b>PRI</b>	pulse repetition interval
<b>PRI AMP</b>	primary amplification
<b>PRIDET</b>	primary detection
<b>PRIFLY</b>	primary flight control
<b>PRI ID</b>	primary identification
<b>PRIME</b>	plastics removal in the marine environment
<b>PRI-PBB</b>	primary passive broadband
<b>PRISS</b>	primary ship to shore

<b>PRITAC</b>	primary tactical; primary tactical frequency
<b>PRN</b>	pseudo-random noise
<b>PRO</b>	plotting room officer
<b>PROBSUB</b>	probable submarine
<b>PROC</b>	processor
<b>PROP</b>	propeller
<b>PROPLOSS</b>	propagation loss
<b>PRP</b>	personnel reliability program
<b>PRS</b>	provide repair service
<b>PRTS</b>	precedence request time slots
<b>Ps</b>	excess power
<b>PS</b>	port security
<b>PSA</b>	port support activity; post shakedown
<b>PSC</b>	personnel services company; port security company (MTMC); principal subordinate command
<b>PSD</b>	projectile seating distance
<b>PSDG</b>	projectile seating distance gauge
<b>PSE</b>	proximity sensing element; prevention of stripping equipment
<b>PSHD</b>	port security and harbor defense
<b>PSHDGRU</b>	port security and harbor defense group
<b>PSICP</b>	program support inventory control point
<b>PSK</b>	phase shift keying
<b>PSLT</b>	pressurized sonobuoy launch tube
<b>PSP</b>	portable sensor platform; physical security plan
<b>PSPC</b>	passive sonobuoy pattern computation; personnel support company
<b>PSR</b>	propeller shaft rate; predicted sonar range
<b>PSS</b>	point of safe return; presearch skim
<b>PSSS</b>	pre-search sea-skim mode

<b>PST</b>	primary search tone; primary search tonal; precision strike Tomahawk
<b>PSU</b>	power supply unit
<b>PSYOP</b>	psychological operations
<b>PT</b>	patrol torpedo
<b>PTA</b>	planned time of arrival; proposed technical approaches
<b>PTC</b>	personnel transfer capsule; predictive threshold control
<b>PTDS</b>	post-tune-drift-stabilization
<b>PTF</b>	patrol torpedo, fast
<b>PTG</b>	priority track gate
<b>PTL</b>	prioritized target list
<b>PTM</b>	personnel transport module
<b>PTOI</b>	primary target of interest
<b>PTP</b>	point-to-point
<b>PTU</b>	power transfer unit
<b>PU</b>	participating unit
<b>PUCR</b>	programmable underwater communications receiver
<b>PUK</b>	pack-up kit
<b>PUP</b>	pull-up point
<b>PVC</b>	pressure vent control
<b>PVCS</b>	protected voice communication systems
<b>PVO</b>	private voluntary organizations
<b>PVR</b>	port visit report; pump vane rate
<b>PVSTS</b>	port visits
<b>PWC</b>	public works center; primary warfare commander; principal warfare commander
<b>PWD</b>	public works department; programmed warhead detonation
<b>PWR</b>	pressurized water reactor; prepositioned war reserve
<b>PWRM</b>	prepositioned war reserve materiel
<b>PWRMS</b>	prepositioned war reserve materiel stock



<b>PWRS</b>	prepositioned war reserve stock
<b>PZ</b>	pickup zone
<b>QA</b>	quality assurance
<b>QC</b>	quality control
<b>QE</b>	quadrant elevation
<b>QLP</b>	quiet landing procedures
<b>QMCS</b>	quality monitoring control system
<b>QRLS</b>	quick reaction launch system
<b>QRS</b>	quick reaction strike; quick reaction support
<b>QS</b>	quick stop
<b>QSL</b>	message acknowledgment
<b>QSTAG</b>	quadripartite standardization agreement
<b>QTY</b>	quantity
<b>QUADCON</b>	quadruple container
<b>QUAL</b>	qualification
<b>R&amp;A</b>	rescue and assistance
<b>R&amp;D</b>	research and development
<b>R2P2</b>	rapid response planning process
<b>R/I SAT</b>	radar/IFF saturation
<b>R/O</b>	receive only
<b>R/T</b>	recorder/timer; receive/transmit; radiotelephone; receiver/transmitter
<b>R/W</b>	rotary wing
<b>RA</b>	ready alert
<b>RA/TA</b>	restricted availability/technical availability
<b>RAAWS</b>	radar altimeter and altitude warning system
<b>RABFAC</b>	radar beacon forward air controller
<b>RAC</b>	readiness acceptance check; radar azimuth converter; repair, alignment, and calibration; river assault craft

<b>RAD</b>	restricted availability docking; radar data; required availability date; radiation absorbed dose
<b>RADALT</b>	radar altitude
<b>RADAY</b>	radio day
<b>RAD-B</b>	expanded radar data
<b>RADC</b>	regional air defense commander
<b>RADCM</b>	radar countermeasures
<b>RADCON</b>	radiation control; radiological control; radiological control team
<b>RADDS</b>	radar display and distribution system
<b>RADEX</b>	radar exercise
<b>RADHAZ</b>	electromagnetic radiation hazards; radiation hazard
<b>RADIAC</b>	radiation detection, indication, and computation
<b>RADINT</b>	radar intelligence
<b>RAL</b>	remote area landing
<b>RALS</b>	remote area landing system
<b>RAM</b>	random antiterrorism measures; rolling airframe missile
<b>RAN</b>	reconnaissance attack navigator
<b>RAP</b>	radar aiming point; reliable acoustic path; remedial action program
<b>RAS</b>	replenishment at sea; rear area security
<b>RASCAR</b>	rasterscan collision avoidance radar
<b>RASP</b>	recognizable air and surface picture
<b>RASS</b>	random access storage set
<b>RAST</b>	recovery assist, securing, and traversing system
<b>RAT</b>	record as target
<b>RATCC</b>	radar air traffic control center
<b>RATO</b>	rocket-assisted takeoff
<b>RATS</b>	random access time slot
<b>RATT</b>	radio teletype

<b>RAV</b>	restricted availabilities
<b>RAW</b>	reconnaissance attack wing (Navy)
<b>RAWS</b>	radar altimeter warning system
<b>RAYCAS</b>	Raytheon collision avoidance system
<b>RBA</b>	radar beacon acquisition; range, bearing, and altitude
<b>RBE</b>	random bearing error; remain-behind equipment
<b>RBL</b>	range and bearing launch
<b>RBOC</b>	rapid blooming off-board chaff
<b>RBS</b>	readiness-based sparing; radar bomb scoring
<b>RBU</b>	rocket-thrown bomb
<b>RCA</b>	radar-controlled approach; rate change authorization
<b>RCC</b>	regional combatant commander; radar control computer
<b>RCCOW</b>	return channel control order wire
<b>RCEM</b>	regional contingency engineering manager
<b>RCI</b>	remote control indicator
<b>RCM</b>	reliability-centered maintenance
<b>RCOH</b>	refueling complex overhauls
<b>RCP</b>	remote control panel
<b>RCR</b>	runway condition reading
<b>RCS</b>	radar cross section; radio communication system
<b>RCU</b>	remote communication unit; remote control unit
<b>RCV</b>	receive
<b>RCZ</b>	range to the first convergence zone
<b>RD</b>	recognition differential
<b>R-Day</b>	redeployment day
<b>RDC</b>	rapid development capability
<b>RDD</b>	required delivery date
<b>RDF</b>	radio direction finding

<b>RDG</b>	radar display group
<b>RDIL</b>	radar detection, identification, and location; radio dual in line
<b>RDM</b>	remote display monitor
<b>RDMF</b>	rapidly deployable medical facility
<b>RDP</b>	radar display processor; radar data processor
<b>RDR</b>	radar detection range
<b>RDS</b>	rapid deployment suite
<b>RDSS</b>	rapidly deployable surveillance system
<b>RDT</b>	rotational directional transmission
<b>RDT&amp;E</b>	research, development, test, and evaluation
<b>RDX</b>	rapid denoting explosive
<b>RDYALRT</b>	ready alert
<b>REACQ</b>	reacquisition
<b>READU</b>	ready duty; ready unit
<b>REC</b>	regional evaluation center
<b>RECO</b>	real estate contracting officer
<b>RECON</b>	reconnaissance
<b>REFTRA/RFT</b>	refresher training
<b>REI</b>	range/elevation indicator
<b>REM</b>	recovery exercise module
<b>REP</b>	range error probable
<b>RESCAP</b>	rescue combat air patrol
<b>RESCORT</b>	rescue escort
<b>RESEAD</b>	rescue suppression of enemy air defenses
<b>RESS</b>	radar environmental simulator system
<b>RF</b>	radio frequency; reserve force; response force
<b>RFA</b>	request for assistance; restrictive fire area
<b>RFATW</b>	radio frequency all the way

<b>RFC</b>	required functional capability
<b>RF-CC</b>	radio frequency connected command center
<b>RFCS</b>	radio frequency carrier shift
<b>RFD</b>	remote firing device
<b>RFF</b>	radio frequency finder; request for fire
<b>RFI</b>	requests for intelligence; ready for issue
<b>RFM</b>	radio frequency monitor
<b>RFML</b>	RF memory unit
<b>RFO</b>	reduced frequency oscillation
<b>RFOM</b>	relative figure of merit
<b>RFP</b>	request for proposal
<b>RFS</b>	ready for sea
<b>RFT</b>	radar free time
<b>RG</b>	air ambulance
<b>RGB</b>	red-green-blue
<b>RGDCP</b>	range deception
<b>RGL</b>	receive guard list
<b>RGM</b>	ship-launched active/passive homing guided missile
<b>RHAW</b>	radar homing and warning
<b>RHAWS</b>	radar homing and warning system
<b>RHI</b>	radar height indicator
<b>RHIB</b>	rigid hull inflatable boat
<b>RHR</b>	radar electrical rack (radar uplink/downlink)
<b>RIB</b>	rubberized inflatable boat; rigid inflatable boat; router information base
<b>RIC</b>	receiver interface control(ler); resource identification code
<b>RICO</b>	regional interface control officer
<b>RIED</b>	regulator in-line emergency disconnect
<b>RIF</b>	rate input form; reduction in force

<b>RIM</b>	ship-launched intercept guided missile
<b>RIO</b>	radar intercept officer
<b>RIU</b>	remote interface unit
<b>RL</b>	reverberation level
<b>RLD</b>	ready to load date
<b>RLGN</b>	ring laser gyro navigator
<b>RLPA</b>	rotating log periodic antenna
<b>RLST</b>	reconstitution liaison support team
<b>RLT</b>	regimental landing team
<b>RM</b>	religious ministry; monostatic range; risk management
<b>Rm</b>	equivalent monostatic range
<b>RM/FTS</b>	religious ministry/fleet training strategy
<b>RMA</b>	reliability maintainability analysis; rocket motor assembly
<b>RMC</b>	regional maintenance center; rescue mission commander; reduced material condition
<b>RMCC</b>	readiness and movement coordination center
<b>RMI</b>	radio magnetic indicator
<b>Rmin</b>	minimum firing range
<b>RMOW</b>	radioman of the watch
<b>RMP</b>	reprogrammable microprocessor
<b>RMT</b>	religious ministry team; regional maintenance team
<b>RMU</b>	refresh memory unit (NTDS)
<b>RNDN DIV</b>	random diversity
<b>RNR</b>	reverberation-to-noise ratio
<b>RNS</b>	radar navigation set
<b>RO</b>	range only
<b>RO/RO</b>	roll-on/roll-off
<b>ROB</b>	radar order of battle; reserve on board

<b>ROC</b>	regional operations center; required operational capability; rate of climb; reduced operational capability program (NTDS)
<b>ROD</b>	range of the day; report of discrepancy
<b>ROE</b>	rules of engagement
<b>ROF</b>	religious offering fund; rate of fire
<b>ROICC</b>	resident officer-in-charge of construction
<b>ROM</b>	read-only memory; right option matrix
<b>ROR</b>	range only radar
<b>ROS</b>	remote optical site; reduced operating status; remote optical sight
<b>ROS-5</b>	five-day reduced operational status
<b>ROTHR</b>	relocatable over-the-horizon backscatter radar
<b>ROU</b>	radius of uncertainty
<b>ROV</b>	remotely operated vehicle; repair of vessels
<b>ROZ</b>	restricted operations zone
<b>RP</b>	reference position
<b>RPG</b>	rocket-propelled grenade
<b>RPL</b>	repair party leader
<b>RPM</b>	random pulse modulation; reprogrammable microprocessor; revolutions per minute
<b>RPMA</b>	real property maintenance and acquisition
<b>RPPI</b>	repeater plan position indicator
<b>RPV</b>	remotely piloted vehicle
<b>RQMT</b>	requirement
<b>RR</b>	reduction ratio
<b>RRBT</b>	rapid response boarding team
<b>RRC</b>	regional repair facility
<b>RRDF</b>	roll-on/roll-off (RO/RO) discharge facility
<b>RRDT</b>	random rotational directional transmission
<b>RRF</b>	ready reserve fleet

<b>RRP</b>	radio reconnaissance platoon (USMC); repair and replenishment point
<b>RRR</b>	rapid runway repair
<b>RRS</b>	readiness reportable status; remote receiving station
<b>RRT</b>	regional response team
<b>RS</b>	rescue swimmer; receiving sensitivity
<b>RSC</b>	radar set control
<b>RSEAD</b>	reactive suppression of enemy air defense
<b>RSG</b>	regional support group
<b>RSL</b>	received signal level
<b>RSO&amp;I</b>	reception, staging, onward movement, and integration
<b>RSP</b>	recognized surface picture; Red Switch Project (DOD)
<b>RSR</b>	ready service ring; remote sensor relay
<b>RSS</b>	root sum square; ready supply store; raster scan surveillance; radar systems supervisor
<b>RSSC</b>	radar-sonar surveillance center (IUW)
<b>RSSK</b>	rigid seat survival kit
<b>RSSU</b>	remote site simulation unit
<b>RST</b>	reset
<b>RSTA</b>	reconnaissance, surveillance, and target acquisition
<b>RT</b>	remote terminal
<b>RTA</b>	receiver transmitter antenna
<b>RTB</b>	return to base
<b>RTCH</b>	rough terrain container handler
<b>RTD</b>	radar track discriminator; return to duty
<b>RTE</b>	run to enable
<b>RTF</b>	return to force
<b>RTG</b>	reconnaissance technical groups
<b>RTI</b>	radar target identification
<b>RTM</b>	radar terrain masking



<b>RTN</b>	relative threat number; received track number
<b>RTOS</b>	real-time operating system
<b>RTQ</b>	remote track quality
<b>RTS</b>	readiness training squadron; real-time subsystem; remote tracking station; rapid targeting system; run to stop
<b>RTSL</b>	radar target signal list
<b>RTSV</b>	real-time synthetic video
<b>RTTY</b>	radio teletype
<b>RU</b>	recovery unit; reporting unit
<b>RUC</b>	reporting unit code; riverine utility craft
<b>RUHP</b>	rescue unit home port
<b>RUI</b>	remote under-ice
<b>RUTH</b>	radio user tactical handbook
<b>RV</b>	long-range seagoing rescue vessel; reentry vehicle; rekeying variable; rendezvous
<b>RVAH</b>	reconnaissance attack squadron (Navy)
<b>RVB</b>	calibrated decibel level
<b>RVM</b>	rising vertical mine
<b>RVT</b>	random velocity target
<b>RWCM</b>	regional wartime construction manager
<b>RWI</b>	radio wireline interface
<b>RWR</b>	radar warning receiver
<b>RWS</b>	range while search
<b>RX</b>	receiver
<b>RZ</b>	recovery zone
<b>S</b>	salinity
<b>S&amp;C</b>	sensors and controls
<b>S&amp;A</b>	safe and arm; safety and arming
<b>S&amp;IS</b>	survey and investigating staff

<b>S&amp;M</b>	scheduling and movement
<b>S&amp;T</b>	scientific and technical
<b>S/A</b>	surface-to-air
<b>S/J</b>	signal-to-jammer ratio
<b>S/L</b>	sea level
<b>S/N</b>	signal to noise
<b>S/P</b>	sound-powered telephone
<b>S/S</b>	steamship
<b>S/T</b>	short ton
<b>S/V</b>	sailboat; sailing vessel
<b>SA</b>	security assistance; selective availability (GPS); senior adviser; situational awareness; staging area; stand-alone switch; spherical array; spectrum analyzer; search angle; surveillance area; situation awareness; stand-alone
<b>SAAM</b>	special assignment airlift mission
<b>SAC</b>	special accounting code; scene-of-action commander; special agent in charge; supporting arms coordinator
<b>SAC(A)</b>	supporting arms coordinator (airborne)
<b>SACC</b>	supporting arms coordination center
<b>SACNET</b>	scene-of-action commander coordination and reporting
<b>SAD</b>	submarine anomaly detection; sector air defense
<b>SAD C&amp;R</b>	sector AD coordination and reporting (net)
<b>SADC</b>	sector air defense commander
<b>SADSAC</b>	small acoustic device simulating aircraft carrier
<b>SAEWS</b>	ship's advanced electronic warfare system
<b>SAFE</b>	secure analyst file environment; selected area for evasion
<b>SAG</b>	surface action group
<b>SAGC</b>	surface action group commander
<b>SAI</b>	sea-to-air interface; single agency item
<b>SAIL</b>	ship's armament inventory list

<b>SAILORD</b>	sailing order
<b>SAL</b>	small arms locker
<b>SALM</b>	single anchor leg mooring
<b>SALT</b>	supporting arms liaison team; strategic arms limitation talks
<b>SAM</b>	surface-to-air missile
<b>SAMAR</b>	ship assistance/maintenance and repair
<b>SAMEX</b>	surface-to-air missile exercise
<b>SAMF</b>	ship's air maintenance facility
<b>SAMID</b>	ship's antimissile integrated defense
<b>SANS</b>	ship arrival notification system
<b>SAO</b>	special activities office
<b>SAOCS</b>	submarine air optical communication system
<b>SAP</b>	surface attack permit; simplified acquisition procedure; search action plan
<b>SAPBB</b>	spherical array passive broadband
<b>SAPNB</b>	spherical array passive narrowband
<b>SAPO</b>	subarea petroleum office
<b>SAR</b>	search and rescue; synthetic aperture radar
<b>SARMC</b>	search and rescue mission commander
<b>SARS</b>	shipboard automatic recorder system
<b>SARSAT</b>	search and rescue satellite-aided tracking; search and rescue satellite
<b>SARTF</b>	search and rescue task force
<b>SARTS</b>	small arms remote target system; salvage assistance response team (MDSU)
<b>SAS</b>	sensor acquisition section; single audio system
<b>SASP</b>	single advanced signal processor
<b>SASS</b>	special aircraft service ship; suspended array surveillance system
<b>SASSY</b>	supported activities supply systems
<b>SASWCS</b>	surface antisubmarine warfare control system
<b>SAT</b>	security alert team; submarine advisory team; satellite; security alert team

<b>SATCOM</b>	satellite communications
<b>SATHICOM</b>	satellite high command
<b>SATNAV</b>	satellite navigation
<b>SATRTN</b>	saturation
<b>SATS</b>	short airfield for tactical support
<b>SATVOX</b>	satellite voice
<b>SATVUL</b>	satellite vulnerability
<b>SAU</b>	search and attack unit; search attack unit; spectrum analyzer unit
<b>SAV</b>	strike attack vector
<b>SAVE</b>	shortages and valuable excess
<b>SAW</b>	squad automatic weapon
<b>SAWID</b>	shipboard acoustic warfare integrated defense
<b>SB</b>	sideband
<b>SBAB</b>	single beam all band
<b>SBCS</b>	sea ballast control station
<b>SBFC</b>	shore-based forces command
<b>SBJ</b>	surface bounce jammer; sea bounce jammer
<b>SBR</b>	special boat squadron
<b>SBSB</b>	single beam single band
<b>SBU</b>	small battle unit; special boat unit
<b>SC</b>	sea combat; screen commander/coordinator; sea current; search and rescue coordinator; station clock
<b>SCA</b>	sound channel axis; shipping control authority; stabilizer control amplifier
<b>SCAN</b>	switched circuit automatic network
<b>SCAT</b>	small caliber action team; submarine classification and tracking
<b>SCC</b>	shipping control coordinator; shipping coordination center; system coordinate center; sea combat commander
<b>SCC C&amp;R</b>	sea combat commander, coordination and reporting (net)
<b>SCCTV</b>	secure closed-circuit television

<b>SCD</b>	ship's center display
<b>SCES</b>	single contact evaluation summary
<b>SCG</b>	secondary control group
<b>SCI</b>	sensitive compartmented information
<b>SCIF</b>	sensitive compartmented information facility
<b>SCIR</b>	subsystem capability impact reporting
<b>SCL</b>	scene center line; standard conventional load
<b>SCLSI</b>	ship configuration and logistics support information
<b>SCLSIS</b>	ship configuration and logistics support information system
<b>SCO</b>	service craft overhaul; secondary control officer
<b>SCONUM</b>	ship control number
<b>SCOT</b>	single channel objective terminal
<b>SCP</b>	sensor correlation program; ship control panel; shipping control point
<b>SCR</b>	silicon-controlled rectifier
<b>SCREENEX</b>	screening exercise
<b>SCRF</b>	small craft repair facility
<b>SCS</b>	secure communication system
<b>SCT</b>	shipping coordination team
<b>SCU</b>	system control unit; signal conditioning unit
<b>SD</b>	surface duct; self-destruct; search depth
<b>S-D</b>	synchro-to-digital
<b>SD/T</b>	surface detector/tracker
<b>SDA</b>	ship's destination authority; source data automation
<b>SDACC</b>	self-deploying aircraft control center
<b>SDC</b>	sonar data computer
<b>SDD</b>	SURTASS data distribution; sensor data display
<b>SDDP</b>	shipboard data display computer
<b>SDF</b>	surface direct fire (mode)

<b>SDLM</b>	standard depot level maintenance
<b>SDM</b>	shore data manager
<b>SDMS</b>	shipboard data multiplexing system
<b>SDNS</b>	secure data network system
<b>SDP</b>	shipboard data processor
<b>SDR</b>	signal data recorder; supply discrepancy report
<b>SDS</b>	speed-dependent source; satellite data system
<b>SDSMS</b>	self-defense surface missile system
<b>SDT</b>	search dwell time; steered directional transmission
<b>SDV</b>	sea-air-land team (SEAL) delivery vehicle; submerged delivery vehicle
<b>SDVTU</b>	SEAL delivery vehicle task unit
<b>SDZ</b>	self-defense zone
<b>SE</b>	signal excess
<b>SEABEE</b>	Navy construction engineer; sea barge
<b>SEABT</b>	Seabee team
<b>SEAC</b>	submarine exercise area coordinator
<b>SEAD</b>	suppression of enemy air defenses
<b>SEAL</b>	sea-air-land team
<b>SEAMEX</b>	seamanship exercise
<b>SEAOPDET</b>	sea operational detachment
<b>SEAR</b>	selected emitter automatic response
<b>SEAVAN</b>	military container moved via ocean
<b>SEC</b>	submarine element coordinator
<b>SECEX</b>	security exercise
<b>SECNAV</b>	Secretary of the Navy
<b>SECREP</b>	secondary reparable
<b>SECVOX</b>	secure voice
<b>SED</b>	simulative electromagnetic deception

<b>SEDSCAF</b>	standard ELINT (electronics intelligence) data system codes and format
<b>SEED</b>	supplementary emergency breathing device
<b>SEEK</b>	survival, escape, and evasion kit
<b>SEER</b>	submarine explosive echo ranging
<b>SEEREP</b>	ships' essential equipment requisition expediting program
<b>SEF</b>	sealift enhancement feature; shipboard engagement tactics
<b>SEL</b>	selected equipment list; support equipment list
<b>SELF</b>	strategic expeditionary landing field (USMC)
<b>SELOR</b>	shipboard emitter locating format
<b>SELRES</b>	selective reserve
<b>SEP</b>	SOSUS estimated position; spherical error probable; sealift enhancement program
<b>SERE</b>	survival, evasion, resistance, escape
<b>SES</b>	signal exploitation system
<b>SESS</b>	ship's signals exploitation space
<b>SET</b>	shipboard engagement tactics
<b>SETL</b>	security environment threat list
<b>SEWC</b>	space and electronic warfare commander
<b>SEWS</b>	secondary control workstation
<b>SEXTANT</b>	signals exploitation tactical net
<b>SEZ</b>	sector engagement zone
<b>SF</b>	security force; special forces
<b>SFCP</b>	shore fire control party
<b>SFM</b>	supply and financial management
<b>SGR</b>	strike group route
<b>SGS</b>	shipboard gridlock system
<b>SGS/AC</b>	shipboard gridlock system/automatic correlation
<b>SGSA</b>	submarine-generated search area
<b>SGSI</b>	stabilized glide slope indicator

<b>SHEDS</b>	ship/helicopter extended delivery system
<b>SHEL</b>	shore ELINT (electronic intelligence) system
<b>SHF</b>	super-high frequency
<b>SHIP ALT</b>	ship alteration
<b>SHM</b>	ship's heading marker
<b>SHML</b>	ship's hazardous material list
<b>SHORCAL</b>	shore-based consolidated allowance list
<b>SHR</b>	shore
<b>SHT</b>	special hull treatment
<b>SI</b>	special intelligence
<b>SIA</b>	submerged interference advisory
<b>SIAC</b>	sensor integration and control
<b>SIAF</b>	single integrated air picture
<b>SIB</b>	ship's information book
<b>SIC</b>	subject identification code; sonar information center
<b>SID</b>	seismic intrusion device; standard instrument departure; sudden ionospheric disturbance; surveillance identification director (USMC); standard information display
<b>SIF</b>	special intelligence file; selective identification feature
<b>SIGINT</b>	signals intelligence
<b>SIGS</b>	simulated imagery generation system
<b>SIGSEC</b>	signal security
<b>SIL</b>	signals identification list
<b>SILO</b>	signal location
<b>SIM</b>	selected item management; submarine intended movement
<b>SIMAS</b>	sonar in-situ mode assessment system
<b>SINEWS</b>	ship's integrated electronic warfare system
<b>SINS</b>	ship's inertial navigation system
<b>SIO</b>	senior intelligence officer



<b>SIOP</b>	Single Integrated Operational Plan
<b>SIPRNET</b>	SECRET Internet Protocol Router Network
<b>SIR</b>	search, inspection, and recovery
<b>SIT</b>	special interest target
<b>SITE</b>	shipboard information training and education
<b>SITMAP</b>	situation map
<b>SITOR</b>	simplex telex over radio; simplex teletype over radio
<b>SITREP</b>	situation report
<b>SIU</b>	sensor-interface unit
<b>SIV</b>	special interest vehicle; special interest vessel; special operations intelligence vehicle
<b>SIWAC</b>	signals warfare coordinator
<b>SIZ</b>	seasonal ice zone
<b>SJA</b>	Staff Judge Advocate
<b>SJM</b>	selected job management
<b>SK</b>	short range (mode)
<b>SKE</b>	station-keeping equipment
<b>SKED</b>	schedule
<b>SL</b>	sea level; switch locator; source level
<b>SLAM</b>	sea-launched air missile; short lofar altering message; stand-off land attack missile
<b>SLAMEX</b>	sea-launched attack missile exercise
<b>SLATE</b>	submarine-launched two-way expendable
<b>SLB</b>	single-leg bearing
<b>SLBM</b>	submarine-launched ballistic missile
<b>SLC</b>	sidelobe cancellation; sonobuoy launch container; satellite link controller
<b>SLCM</b>	sea-launched cruise missile; submarine launched cruise missile
<b>SLCP</b>	ship lightering control point; ship's loading characteristics pamphlet
<b>SLD</b>	sonic layer depth
<b>SLE</b>	sealift liaison element; spectral line equalization

<b>SLEP</b>	service life extension program
<b>SLF</b>	special landing force
<b>SLIC</b>	strategic logistics information cell
<b>SLOC</b>	sea line of communications
<b>SLOT</b>	submarine-launch one-way transmission
<b>SLP</b>	seaward launch point; surface launch platform
<b>SLPS</b>	ships loading plan sequence
<b>SLR</b>	side-looking radar
<b>SLS</b>	sonobuoy localization system
<b>SLT</b>	scheduled launch time; sonobuoy launch tube
<b>SLT&amp;A</b>	search, localize, track, and attack
<b>SM</b>	smoke marker; standard missile
<b>SM&amp;R</b>	source maintenance and recoverability
<b>SMAA</b>	submarine movement advisory authority
<b>SMASH EX</b>	search for simulated submarine casualty exercise
<b>SMAW</b>	shoulder-launched multipurpose assault weapon
<b>SMC</b>	system maintenance console
<b>SMCM</b>	surface mine countermeasures
<b>SMD</b>	strategic missile defense
<b>SMDG</b>	standoff mine detection ground
<b>SME</b>	subject matter expert
<b>SMF</b>	system management facility
<b>SMG</b>	scan mode gate; speed made good; submachine gun
<b>SMIP</b>	ship's 3M improvement plan
<b>SMP</b>	ship's mission profile
<b>SMS</b>	surface missile system; system monitoring station
<b>SMSF</b>	special mission support force
<b>SMU</b>	special mission unit

<b>SNAIAS</b>	ship navigation and aircraft inertial alignment system
<b>SNDL</b>	standard Navy distribution list
<b>SNF</b>	strategic nuclear forces
<b>SO</b>	special operations
<b>SOA</b>	speed of advance
<b>SOBT</b>	submarine onboard training
<b>SOC</b>	satellite operations center; special operations capable; strike operations coordinator; special operations craft
<b>SOCA</b>	submarine operations coordinating authority
<b>SOCC</b>	special operations control center
<b>SOCEX</b>	special operations capable exercise
<b>SOD</b>	sonar operator display
<b>SODL</b>	submarine operational data link
<b>SOE</b>	schedule of events; submerged operating envelope; status of emissions
<b>SOF</b>	special operations forces; supervisor of flying
<b>SOFAR</b>	sound fixing and ranging
<b>SOFLAM</b>	special operations forces laser marker
<b>SOFSA</b>	special operations forces support activity
<b>SOI</b>	signal of interest; signal operating instructions; space object identification
<b>SOLAS</b>	safety of life at sea
<b>SOLE</b>	special operations liaison element
<b>SOM</b>	system operator manual
<b>SONET</b>	synchronous optical network
<b>SOP</b>	standard operating procedure; standing operating procedure(s); ship's operational program
<b>SOPA</b>	senior officer present afloat (USN)
<b>SOPAREA</b>	submarine operating area
<b>SOR</b>	specific operational requirement
<b>SORAP</b>	signature overlay range prediction

<b>SORM</b>	ship's organization and regulation manual; standard organization and regulation manual
<b>SORTS</b>	Status of Resources and Training System
<b>SOS</b>	special operation squadron (USAF)
<b>SOSAT</b>	submarine operating satellite
<b>SOSS</b>	sound search station
<b>SOSUS</b>	sound surveillance underwater system
<b>SOW</b>	special operations wing; standoff weapon; statement of work
<b>SPA</b>	IUSS probability area; SOSUS probability area
<b>SPC</b>	strength, power, and communication
<b>SPE</b>	single-point expansion
<b>SPEAR</b>	signal processing, evaluation, alert, and report
<b>SPECOPS</b>	special operations
<b>SPECWAR</b>	special warfare
<b>SPF</b>	special purpose forces
<b>SPGPM</b>	shots per gun per minute
<b>SPIE</b>	special patrol insertion and extraction
<b>SPINS</b>	special instructions
<b>SPL</b>	sound pressure level
<b>SPLX</b>	simplex
<b>SPM</b>	secondary propulsion motor; single point mooring; single port manager
<b>SPMCM</b>	self-protective mine countermeasures
<b>SPOD</b>	seaport of debarkation
<b>SPOE</b>	seaport of embarkation
<b>SPRINT</b>	special psychiatric rapid intervention team
<b>SPS</b>	standard positioning system; secondary propulsion system
<b>SPW</b>	special warfare
<b>SQAT</b>	ship's qualification assistance team
<b>SRA</b>	shop replaceable assembly; ship restricted availability; shipping risk area

<b>SRAR</b>	short-range air reconnaissance
<b>SRB</b>	scan relative bearing
<b>SRC</b>	submarine rescue chamber; satellite resource controller
<b>SRDT</b>	single rotational directional transmission
<b>SRE</b>	survivor recovery element
<b>SRI</b>	storeroom item
<b>SRIP</b>	ship readiness improvement program
<b>SRL</b>	sonobuoy receiver logic
<b>SRM</b>	short-range missile
<b>SROE</b>	standing rules of engagement
<b>SRP</b>	sound reference point; sealift readiness program; seaward recovery point
<b>SRR</b>	strategic readiness requirement
<b>SRS</b>	sonobuoy reference system
<b>SRT</b>	special reaction team
<b>SRU</b>	ship repair unit; search and rescue unit; survivor rescue unit
<b>SRX</b>	sonobuoy receiver set
<b>SS</b>	sea state; submarine
<b>SS (number)</b>	sea state (number)
<b>SSA</b>	sector space averaging
<b>SSAP</b>	submarine sonar adaptive processor; single advanced signal processor
<b>SSB</b>	single side band
<b>SSBN</b>	fleet ballistic missile submarine
<b>SSB-SC</b>	single sideband-suppressed carrier
<b>SSC</b>	surface surveillance coordination
<b>SSCSMP</b>	surface ship combat systems master plan
<b>SSCT</b>	special security communications team
<b>SSCZ</b>	sector search convergence zone
<b>SSDP</b>	sector search direct path

<b>SSDS</b>	ship's self-defense system
<b>SSE</b>	sound speed excess; surface support element
<b>SSECCS</b>	surface ship exterior communications and control system
<b>SSEE</b>	ship's signals exploitation equipment
<b>SSF</b>	sonar search frequency
<b>SSG</b>	surface strike group
<b>SSGN</b>	nuclear-guided missile submarine
<b>SSIC</b>	standard subject identification code
<b>SSIK</b>	shipboard sonobuoy interface kit
<b>SSIXS</b>	submarine satellite information; submarine satellite information exchange system
<b>SSL</b>	submarine safety lane
<b>SSM</b>	surface-to-surface missile; ship system manual
<b>SSN</b>	attack submarine, nuclear; Social Security number; space surveillance network
<b>SSOA</b>	subsurface ocean area
<b>SSP</b>	shipboard signal processor; sound speed profile
<b>SSPS</b>	sonar signal processing set; sonar signal processing system
<b>SSR</b>	secondary surveillance radar; supply support request; spin-stabilized rocket
<b>SSRNM</b>	surface ship radiated noise measurement
<b>SSS</b>	sector scan surveillance; strike support ship; system supervisor station
<b>SSSC</b>	surface, subsurface search surveillance coordination
<b>SST</b>	sea surface temperature
<b>SSTD</b>	surface ship torpedo defense
<b>SSU</b>	special service unit
<b>SSV</b>	surface sound velocity
<b>SSWC</b>	surface/subsurface warfare coordinator
<b>STA</b>	short time average
<b>STAC</b>	submarine/surface tactical air control(ler)
<b>STADD</b>	ship-towed acoustic deception device

<b>STANAG</b>	standardization agreement (NATO)
<b>STAR</b>	standard attribute reference
<b>STASS</b>	submarine towed array surveillance system
<b>STB</b>	scan true bearing
<b>STBD</b>	starboard
<b>STC</b>	sensitivity time constant; sensitivity time control; short time constant
<b>STD</b>	standard
<b>STDA</b>	sonobuoy tactics decision aid
<b>STDBY</b>	standby
<b>STDL</b>	submarine tactical data link
<b>STG</b>	special tactics group
<b>STICCS</b>	submarine tactical information command and control system
<b>STK</b>	strike
<b>STL</b>	security team leader
<b>STN</b>	standard track number
<b>STO</b>	short takeoff
<b>STOBT</b>	submarine tactical onboard training
<b>STOI</b>	surface track of interest
<b>STOL</b>	short takeoff and landing
<b>STOM</b>	ship-to-objective maneuver
<b>STOPS</b>	standoff optical surveillance system
<b>STOSS</b>	shore targeting operations support system
<b>STOVL</b>	short takeoff and vertical landing aircraft
<b>STRAAD</b>	special techniques repair analysis aircraft damage
<b>STREAM</b>	standard tensioned replenishment alongside method
<b>STRIKEX</b>	striking force exercise
<b>STT</b>	shore targeting terminal; single target tracker; small tactical terminal; special tactics team

<b>STTS</b>	subscriber transmission time slot
<b>STU</b>	shore targeting unit; subscriber transmission unit; secure telephone unit
<b>STW</b>	strike warfare; speed through the water
<b>STWC</b>	strike warfare commander
<b>SU</b>	search unit
<b>SUA</b>	special use airspace
<b>SUADPS</b>	shipboard uniform automated data processing system
<b>SUBID</b>	submarine identification
<b>SUBMISS</b>	submarine missing
<b>SUBNOTE</b>	submarine notice
<b>SUBOPAUTH</b>	submarine operating authority
<b>SUBRASS</b>	submarine random access storage set
<b>SUBROC</b>	submarine rocket
<b>SUBSAM</b>	submarine surface-to-air missile
<b>SUBSUNK</b>	submarine sunk
<b>SUC</b>	surf current
<b>SUCAP</b>	surface combat air patrol
<b>SUDAPS</b>	shipboard uniform automated data processing system
<b>SUPA</b>	surface ship patrol area
<b>SUPP</b>	supplement
<b>SUPPLOT</b>	supplementary plot
<b>SUPPO</b>	supply officer
<b>SUR</b>	surface
<b>SURF</b>	standard underway replenishment fixture
<b>SUROBS</b>	surf observation
<b>SURPIC</b>	surface picture
<b>SURTASS</b>	surveillance towed array sensor system
<b>SUS</b>	signal, underwater sound



<b>SUU</b>	suspended underwing unit
<b>SUW</b>	surface warfare
<b>SUWC</b>	surface warfare commander
<b>SUWWO</b>	surface warfare watch officer
<b>SV</b>	sound velocity
<b>SVC</b>	sensitivity/velocity control; service
<b>SVM</b>	system validation model
<b>SVP</b>	sound velocity profile
<b>SVR</b>	surface vessel radar
<b>SW</b>	shallow water; submarine warfare
<b>SWAL</b>	shallow water attack craft, light
<b>SWAM</b>	shallow water attack craft, medium
<b>SWAP</b>	change of action commander
<b>SWATH</b>	small waterplane-area twin-hull
<b>SWC</b>	ship's weapon coordinator (NTDS); surface warfare coordinator
<b>SWIR</b>	short-wave infrared
<b>SWMCM</b>	shallow water mine countermeasures
<b>SWOP</b>	special weapons ordnance publication (Navy)
<b>SWS</b>	surface warfare supervisor
<b>SWT</b>	servicewide transportation; search while track
<b>SWZ</b>	special watch zone
<b>SXBT</b>	surface expendable bathythermograph; shipborne expendable bathythermograph; shipboard expendable bathythermograph
<b>SYNTAC</b>	synthetic TACCAR
<b>SYSADMIN</b>	system administrator
<b>SZ</b>	surf zone
<b>SZS</b>	surface zonal search
<b>T&amp;E</b>	test and evaluation

<b>T/A</b>	table of allowance
<b>T/B</b>	time-bearing
<b>T/C</b>	tactical coordinator
<b>T/F</b>	time-frequency
<b>T/I</b>	track/illuminator
<b>T/O</b>	takeoff; task organization
<b>T/R</b>	time-range; transmit/receive
<b>T/W</b>	thrust-to-weight
<b>T:B</b>	turbine to blade
<b>TA</b>	target acquisition; target angle; technical authority; target audience; technical arrangement; theater Army
<b>TA/RA</b>	technical availability/restricted ability
<b>TAA</b>	towed array gain; towed array attenuator
<b>TAB</b>	airborne tanker boom
<b>TAC</b>	tactical advanced computer; terminal access controller; terminal attack control; terminal attack controller; tactical computer; tactical air controller; tactical air commander; tactical; transportation account code
<b>TAC(A)</b>	tactical air coordinator (airborne)
<b>TAC-3</b>	third generation tactical advanced computer
<b>TAC-A</b>	tactical air coordinator (airborne)
<b>TACAID</b>	tactical aid
<b>TACAIR</b>	tactical aviation; tactical air forces; tactical aircraft; tactical air
<b>TACAMO</b>	Navy airborne VLF (very low frequency) relay system; take charge and move out
<b>TACAN</b>	tactical aide to navigation; tactical air navigation; tactical air navigation systems
<b>TACBUOY</b>	tactical buoy
<b>TACC</b>	tactical air control center
<b>TACC Afloat</b>	tactical air control center afloat
<b>TACC Ashore</b>	tactical air command center ashore
<b>TACCAR</b>	time averaged clutter coherent airborne radar

<b>TACCO</b>	tactical coordinator
<b>TACCOM</b>	tactical communicator
<b>TACCOPS</b>	tactical air control center operations
<b>TAC D&amp;E</b>	tactical development & evaluation
<b>TACELINT</b>	tactical electronic intelligence
<b>TACGRU</b>	tactical air control group
<b>TACINTEL</b>	tactical intelligence; tactical intelligence information exchange system
<b>TACLET</b>	tactical law enforcement team
<b>TACLOG</b>	tactical-logistical; tactical logistics group
<b>TACMAN</b>	tactics manual
<b>TACMEMO</b>	tactical memorandum
<b>TAC-N</b>	tactical advanced computer-navigation
<b>TACOM</b>	tactical command
<b>TACON</b>	tactical control
<b>TACOPDAT</b>	tactical operational data
<b>TACP</b>	tactical air control party
<b>TAC RECCE</b>	tactical reconnaissance
<b>TACREL</b>	tactical relay
<b>TACREP</b>	tactical report
<b>TACRON</b>	tactical air control squadron
<b>T-ACS</b>	tactical auxiliary crane ship
<b>TACSIG</b>	tactical signal
<b>TACSUM</b>	tactical summary (report)
<b>TACTAS</b>	tactical towed array sonar system; tactical towed array system
<b>TACTERM</b>	tactical terminal; tactical termination
<b>TACTS</b>	tactical aircrew combat training system
<b>TACWAR</b>	tactical warfare model
<b>TAD</b>	tactical decision aid; temporary additional duty

<b>TADIL A</b>	tactical digital information link alfa
<b>TADIXS</b>	tactical data information exchange system
<b>TADP</b>	tactical air direction post
<b>TADREPS</b>	tactical data replay system
<b>TADS</b>	target acquisition and designator sight
<b>TAES</b>	theater aeromedical evacuation system
<b>TAFDS</b>	tactical airfield fuel dispensing system
<b>T-AFS</b>	combat stores ship (MSC)
<b>TAG</b>	Tomahawk aimpoint graphic; target aimpoint graphic
<b>T-AGOS</b>	tactical auxiliary general ocean surveillance; towed auxiliary general ocean surveillance
<b>TAGS</b>	theater air-ground system
<b>T-AH</b>	hospital ship
<b>TAK</b>	cargo ship
<b>T-AK</b>	container and roll-on/roll-off ship
<b>T-AKR</b>	fast logistics ship
<b>TALD</b>	tactical air-launched decoy
<b>TAM</b>	Tomahawk asset management
<b>TAMPS</b>	tactical automated mission planning system
<b>TAN</b>	teletype alert network
<b>TAO</b>	tactical air observation (net); tactical air observer; tactical air officer; tactical actions officer
<b>TAP</b>	transient acoustic processing; tactical analysis plot; training allowance pool
<b>TAPBB</b>	towed array passive broadband
<b>TAPNB</b>	towed array passive narrowband
<b>TAPS</b>	towed array prediction system
<b>TAR</b>	tactical air request; training and administration of reserves; target acquisition radar
<b>TARC</b>	towed array receiver coupler
<b>TARP</b>	towed array ranging program

<b>TARPS</b>	tactical air reconnaissance photo system; tactical air reconnaissance photography system
<b>TARPS DI</b>	tactical air reconnaissance pod system digital imagery
<b>TARS</b>	tethered aerostat radar system
<b>TARSL</b>	tender and repair ship load list
<b>TAS</b>	target acquisition system; true air speed; towed array sensor
<b>TASDA</b>	tactical airborne sonar decision aid
<b>TASMO</b>	tactical air support for maritime operations
<b>TASSRAP</b>	towed array surveillance system range prediction
<b>TATC</b>	tactical air traffic control
<b>T-ATF</b>	fleet ocean tug (MSC)
<b>TAU</b>	transmitter antenna unit
<b>TAV</b>	technical availability; total asset visibility
<b>TAWS</b>	towed array workstation; target acquisition weapons software
<b>TB/TF</b>	time-bearing/time-frequency
<b>TBA</b>	table of basic allowance
<b>TBL</b>	tactical bomb line
<b>TBLUG</b>	tactical bottom loss upgrade
<b>TBM</b>	theater ballistic missile
<b>TBMD</b>	theater ballistic missile defense
<b>TBO</b>	time between overhaul
<b>TBP</b>	time-bearing plot
<b>TBR</b>	time-bearing recorder
<b>TBT</b>	target-bearing transmitter
<b>TBUG</b>	tactical broadcasts user's guide
<b>TC</b>	time charter
<b>TC2S</b>	Tomahawk command and control system
<b>TCA</b>	terminal control area

<b>TCC</b>	tactical communications center; torpedo control console; transportation component command; tactical communication console
<b>TCDL</b>	tactical common data link
<b>TCEM</b>	theater contingency engineering manager
<b>TCG</b>	time code generator; track control group
<b>TCM</b>	torpedo countermeasures
<b>TCMD</b>	transportation control and movement document
<b>TCN</b>	transportation control number
<b>TCO</b>	thrust cut-off; tactical combat operations; tactical control officer; technical cognizance office
<b>TCP</b>	torpedo control panel; tactical contingency pod; timing control point
<b>TCRP</b>	tactical command readiness program
<b>TCS</b>	touch control steering; tactical command system; target control system
<b>TCU</b>	teletype communications unit; terminal control unit; track control unit
<b>TD</b>	turbine direct; tactical data
<b>TDA</b>	torpedo danger area; tactical display area
<b>TDBM</b>	tactical database manager
<b>TDC</b>	track data coordinator
<b>TDCC</b>	tactical data communications
<b>TDDL</b>	time division data link
<b>TDDO</b>	tactical data display operator
<b>TDE</b>	tactical deception element; total delivery error
<b>TDI</b>	target Doppler indicator
<b>TDL</b>	threshold detection level; tactical data link
<b>TDM</b>	time division multiplex; terminal dive maneuver
<b>TDP</b>	tactical data program; temperature/depth profile
<b>TDR</b>	threat detection range; track determinant range
<b>TDS</b>	tactical data system; target designation system
<b>TDSS</b>	tactical decision support subsystem

<b>TDTs</b>	tactical data terminal set
<b>TDU</b>	trash disposal unit; towed drone unit
<b>TDZ</b>	torpedo danger zone
<b>TE</b>	task element; threat EMCON (mode); threat evaluation; trailing edge; turbine electric
<b>TEA</b>	Tomahawk executive agent; touch entry array
<b>TEC</b>	training exercise coordinator
<b>TECHEVAL</b>	technical evaluation
<b>TEG</b>	tactical employment guide
<b>TELINT</b>	telemetry intelligence
<b>TELNET</b>	telecommunication network
<b>TEM</b>	target engagement message
<b>TEMP</b>	temperature; temporary
<b>TEMPALT</b>	temporary alteration
<b>TENCAP</b>	tactical exploitation of national capabilities program
<b>TEOB</b>	tactical electronic order of battle
<b>TEPEE</b>	Tomahawk engagement planning and exercise evaluation
<b>TEPP</b>	Tomahawk engagement planning package
<b>TER</b>	target engagement radar
<b>TERCOM</b>	terrain contour matching
<b>TERI</b>	table of equipment ready issue; torpedo effective range indicator
<b>TERS</b>	tactical event reporting system
<b>TESE</b>	tactical exercise simulator and evaluator
<b>TESP</b>	Tomahawk environmental support product
<b>TEWA</b>	threat evaluation and weapons assignment
<b>TEWDS</b>	tactical electronic warfare deception system
<b>TF</b>	task force
<b>TF/TG CMD</b>	task force/task group command
<b>TFE</b>	transportation feasibility estimate

<b>TFG</b>	transportation facilities guide
<b>TFLC</b>	task force logistic coordinator
<b>TFMRS</b>	task force medical regulating system
<b>TFMS</b>	tactical frequency management system
<b>TFN</b>	target file number
<b>TFP</b>	time-frequency plot
<b>TFPMO</b>	task force preventive medicine officer
<b>TFR</b>	terrain following radar
<b>TFS</b>	task force surgeon
<b>TFTA</b>	tactical fleet training aid
<b>TG</b>	task group
<b>TGBL</b>	through government bill of lading
<b>TG CMD</b>	task group command
<b>TG CRATT</b>	task group covered radio teletype
<b>TGF</b>	TADIXS gateway facility
<b>TGG</b>	temporary geographic grid
<b>TGLC</b>	task group logistic(s) coordinator
<b>TGO</b>	task group Orestes
<b>TGP</b>	TADIXS gateway processor
<b>TGSA</b>	task group submarine area
<b>TGT</b>	target; turbine gas temperature
<b>TGT POSIT</b>	target opposition
<b>TGTTY</b>	task group teletype
<b>TGU</b>	technical guidance unit
<b>THADD</b>	theater high-altitude air defense missile
<b>THDG</b>	true heading
<b>THREATCON</b>	terrorist threat condition
<b>TI</b>	target illuminator; threat integration



<b>TIAS</b>	target identification and acquisition system
<b>TIB</b>	technical information base
<b>TIBS</b>	tactical information broadcast service
<b>TIC</b>	tactical information coordinator
<b>TID</b>	tactical information display
<b>TIDU</b>	tagged input data unit
<b>TIDY</b>	teletypewriter integrated display
<b>TIM</b>	TASS/TACTAS intended movement
<b>TIMI</b>	technical information maintenance instruction
<b>TIMS</b>	tactical information management system; tactical information management services
<b>TIO</b>	target intelligence officer
<b>TIP</b>	target information package; torpedo intercept point; technical improvement plan; tactical intelligence product; target information package
<b>TIPRS</b>	Tomahawk in-flight position reporting system
<b>TIPS</b>	tactical imagery processing system; tactical information processing system
<b>TIR</b>	Tomahawk inventory report; tactical interrogation report (USMC)
<b>TIS</b>	thermal imaging sensor
<b>TISS</b>	thermal imaging sensor system; thermal imaging surveillance system
<b>TK</b>	track
<b>Tk-BB</b>	bottom bounce track
<b>Tk-CZ</b>	convergence zone track
<b>Tk-DP</b>	direct path track
<b>TKE</b>	track angle error
<b>TL</b>	threat level; truckload; transmission loss
<b>TLAM</b>	Tomahawk land-attack missile
<b>TLAM/N</b>	Tomahawk land-attack missile/nuclear
<b>TLAM-D</b>	Tomahawk land-attack missile submunitions (conventional submunitions)
<b>TLCF</b>	TACINTEL (tactical intelligence) link control facility; TACINTEL link control facilities

<b>TLD</b>	thermo-luminescent dosimeter
<b>TLE</b>	target location error
<b>TLL</b>	tender load list
<b>TLM</b>	target localization message
<b>TLR</b>	top-level requirement
<b>TLTI</b>	tracker long-time integration
<b>TLZ</b>	tactical landing zone
<b>TM</b>	tactical memorandum; transverse mercator; trainer module
<b>TMA</b>	target motion analysis
<b>TMAC</b>	TMA coordinator
<b>TMCAP</b>	theater missile combat air patrol
<b>TMD</b>	track management display; torpedo-mounted dispenser
<b>TMDS</b>	Tomahawk mission display system
<b>TMIP</b>	theater medical information program
<b>TML</b>	theater mission library
<b>TMN</b>	true Mach number
<b>TMO</b>	traffic management office
<b>TMPC</b>	theater mission planning center
<b>TMPS</b>	Tomahawk mission planning system
<b>TMS</b>	transportation management system; tactical mission software
<b>T-net</b>	training net
<b>TNS</b>	tactical navigation system; topographic noise stripping
<b>TO</b>	transportation officer
<b>TO&amp;E</b>	table of organization and equipment
<b>TOA</b>	time of arrival
<b>TOC</b>	table of contents; tactical operations center
<b>TOD</b>	time of day
<b>TOF</b>	time of flight

<b>TOGW</b>	takeoff gross weight
<b>TOH</b>	time overhead
<b>TOI</b>	target of intention; target of interest; time of intercept; track of interest
<b>TOO</b>	target of opportunity
<b>TOP</b>	tactical operation plot
<b>TOPO</b>	topographic
<b>TOPS</b>	transportation operational personal property standard system; tactical operational support; tactical optical projection system
<b>TOR</b>	term(s) of reference; time of receipt; tentative operational requirement
<b>TORP</b>	torpedo
<b>TOS</b>	time of search; track on search; time on station
<b>TOSP</b>	tactical ocean surveillance product
<b>TOSS</b>	tactical optical surveillance system; tactical optical support system
<b>TOT</b>	time of transmission; time on target; time over target
<b>TOTC</b>	time-on-target compensation
<b>TP</b>	transportation priority; total protection; technical publication; turn point
<b>TPA</b>	TASS (towed array surveillance system) probability area
<b>TPC</b>	tactical pilotage chart; two-person control
<b>TPD</b>	tons per day
<b>TPFDD</b>	time-phased force deployment data
<b>TPFDDL</b>	time-phased force deployment data list
<b>TPFDL</b>	time-phased force deployment list
<b>TPK</b>	turns-per-knot
<b>TPL</b>	target priority list
<b>TPMRC</b>	theater patient movement requirements center
<b>TPOA</b>	tactical plan of action
<b>TPS</b>	TLAM planning system; test program set; Tomahawk planning system
<b>TPSA</b>	TLAM planning system afloat

<b>TPSB</b>	transportable port security boat
<b>TP-T</b>	target practice-tracer
<b>TPTRL</b>	time-phased transportation requirements list
<b>TPT-T</b>	target projectile training-tracer
<b>TR</b>	turbine reduction
<b>T-R</b>	time range
<b>TRA</b>	torpedo recognition and alert; technical review authority
<b>TRACON</b>	training control; under training control of (commander)
<b>TRAIS</b>	transportation reporting and inquiry system
<b>TRANS</b>	transport
<b>TRAP</b>	tactical receive equipment related applications; tactical recovery of aircraft and personnel; tactical related applications; tanks, racks, adapters, and pylons; terrorism research and analysis program; threat research and analysis program
<b>TRASS</b>	track random access storage set
<b>TRBRG</b>	true bearing
<b>TRCS</b>	transportable recompression chamber system
<b>TRE</b>	tactical receive equipment
<b>TREE</b>	transient radiation effects on electronics
<b>TRF</b>	Trident refit facility; true radiated frequency; true restored frequency
<b>TRIASP</b>	triple advance signal processor
<b>TRIPOD</b>	tactical reconstruction information pod
<b>TRITAC</b>	Difar triangular tactic; triangulation tactic
<b>TRIXS</b>	tactical reconnaissance intelligence exchange system
<b>TRK</b>	track
<b>TRK SUP</b>	track supervisor
<b>TRPU</b>	time reference PU
<b>TRR</b>	tactical range recorder
<b>TRRAPS</b>	transportable reliable acoustic path sonobuoy
<b>TRS</b>	track replaces search

<b>TRT</b>	track resolution type
<b>TRU</b>	true; Tomahawk receiver unit; target reporting unit
<b>TS</b>	target strength
<b>TSA</b>	time sharing algorithm
<b>TSB</b>	transportation support battalion
<b>TSC</b>	Tomahawk strike coordinator; TLAM strike coordinator
<b>TSCM</b>	Tomahawk strike coordination module
<b>TSD</b>	tactical situation display; tactical support device
<b>TSE</b>	tactical signals exploitation
<b>TSEC</b>	telecommunications security
<b>TSES</b>	tactical signal exploitation system
<b>TSH</b>	tri-SAR harness
<b>TSO</b>	tactical sensor operator; tactical systems officer
<b>TSOC</b>	theater special operations command
<b>TSP</b>	transshipment point
<b>TSR</b>	telecommunications service requests; turbine shaft rate; tactical sonar range
<b>TSS</b>	trim, stress, and stability; total ship survivability
<b>TST</b>	tactical support team; theater support team; time-sensitive target
<b>TT</b>	target track; trajectory time
<b>TTB</b>	true target bearing
<b>TTC</b>	target track console; track-to-track correlator
<b>TTDB</b>	theater targets database
<b>TTGI</b>	time to go to intercept
<b>TTGTD</b>	time to go to designation
<b>TTI</b>	time-to-intercept; time-to-impact
<b>TTM</b>	tactical target materials; target through missile
<b>TTP</b>	tactics, techniques, and procedures; trailer transfer point
<b>TTS</b>	Tomahawk transmitter system

<b>TTT</b>	time to target
<b>TTU</b>	transportation terminal unit
<b>TTY</b>	teletype
<b>TU</b>	task unit
<b>TUDET</b>	type unit equipment detail file
<b>TUL</b>	time until launch
<b>TUM</b>	TCI update message
<b>TVA</b>	target value analysis
<b>TVDS</b>	towed vertically directed source
<b>TVT</b>	target verification test
<b>TW</b>	threat warning
<b>TWA</b>	trailing wire antenna
<b>TWCS</b>	Tomahawk weapon control system
<b>TWDE</b>	total weapons delivery error
<b>TWF</b>	tail warning function
<b>TWR</b>	traffic control tower
<b>TWS</b>	Tomahawk weapon system; track while scan
<b>TWSRO</b>	track while scan receive only
<b>TWT</b>	traveling wave tube
<b>TX</b>	transmitter
<b>TYCOM</b>	type commander
<b>UAV</b>	unmanned aerial vehicle
<b>UBA</b>	underwater breathing apparatus
<b>UBFCS</b>	underwater battery fire control system
<b>UC</b>	urgent change
<b>UCAV</b>	unmanned combat aerial vehicle
<b>UCP</b>	Unified Command Plan; universal communications processor
<b>UCT</b>	underwater construction team

<b>UD</b>	underwater demolition
<b>UDP</b>	user datagram protocol
<b>UDT</b>	underwater demolition team
<b>UE</b>	universal exciter
<b>UEP</b>	underwater electric potential
<b>UER</b>	unit equipment report
<b>UFN</b>	until further notice
<b>UHF</b>	ultra high frequency
<b>UHT</b>	unit horizontal tail
<b>UIC</b>	unit identification code
<b>UICP</b>	uniformed inventory control point
<b>UID</b>	unique identifier
<b>UJTL</b>	uniform joint task list
<b>UKL</b>	universal keyset logic
<b>ULF</b>	ultra low frequency
<b>ULN</b>	unit line number
<b>UMC</b>	unit movement coordinator; unspecified minor construction
<b>UMCM</b>	underwater mine countermeasures
<b>UMG</b>	universal mercator grid
<b>UMIB</b>	urgent marine information broadcast
<b>UMIDS</b>	uniform microcomputer disbursing system
<b>UMMIPS</b>	uniform materiel movement and issue priority system
<b>UMO</b>	unit movement officer
<b>UMS</b>	interim JTIDS message specification
<b>UMT</b>	unit ministry team
<b>UND</b>	urgency of need designator; urgency of need
<b>UNIX</b>	uniplexed information and computing system
<b>UNREP</b>	underway replenishment

<b>UNTL</b>	universal naval task list
<b>UPS</b>	uninterrupted power supply; universal polar stereographic
<b>UQC</b>	underwater communication
<b>URC</b>	underway replenishment coordinator
<b>URG</b>	underway replenishment group
<b>URN</b>	unsynchronized random noise
<b>URO</b>	user readout; unrestricted operation
<b>URP</b>	unmanned recovery platform
<b>USA</b>	United States Army
<b>USAF</b>	United States Air Force
<b>USB</b>	upper side band
<b>USCG</b>	United States Coast Guard
<b>USMC</b>	United States Marine Corps
<b>USN</b>	United States Navy; unit stock number
<b>USNS</b>	United States Naval Ship
<b>USS</b>	United States Ship
<b>USW</b>	undersea warfare
<b>USW(C)</b>	undersea warfare coordination
<b>USW(R)</b>	undersea warfare reporting
<b>USWC</b>	undersea warfare commander
<b>UTC</b>	Coordinated Universal Time; unit type code
<b>UTG</b>	user terminal group
<b>UTL</b>	utility boat
<b>UTM</b>	universal transverse mercator
<b>UTO</b>	universal time observed
<b>UTR</b>	underwater tracking range
<b>UTS</b>	universal time standards
<b>UUV</b>	unmanned underwater vehicle



<b>UV</b>	ultraviolet
<b>UWC</b>	underwater communications
<b>UWS</b>	underwater weapon system
<b>UXO</b>	unexploded explosive ordnance; unexploded ordnance
<b>V(A)</b>	aviation ammunition
<b>V(W)</b>	ground ammunition
<b>V/STOL</b>	vertical and/or short takeoff and landing aircraft
<b>VA</b>	vital area
<b>VANSLL</b>	van-loaded special load list
<b>VARVAL</b>	vessel arrival data, list of vessels available to marine safety offices and captains of the port
<b>VASI</b>	virtual approach slope indicator
<b>VASTAC</b>	vector assisted attack
<b>VATS</b>	vertical-lift airfield for tactical support
<b>VAW</b>	carrier airborne early warning squadron
<b>VBS</b>	visit, board, search
<b>VBSS</b>	visit, board, search, and seizure
<b>VBW</b>	vertical beam width
<b>VC</b>	voyage charter
<b>VCTY</b>	vicinity (of geographic position indicated)
<b>VDA</b>	variable dive angle
<b>VDI</b>	visual display indicator
<b>VDL</b>	video data link
<b>VDM</b>	variable dive maneuver
<b>VDP</b>	VLAD direct path
<b>VDR</b>	variable depression receiver; variable depth receiver
<b>VDS</b>	variable depth sonar
<b>VDT</b>	variable depth transducer; video display terminal; variable depression transmission

<b>VECTAC</b>	vectored attack
<b>VEM</b>	versatile exercise mine
<b>VERDIN</b>	VLF (very low frequency) multichannel submarine broadcast; VLF digital information network
<b>VERTREP</b>	vertical replenishment
<b>VFCT</b>	variable frequency carrier telegraph; voice frequency carrier telegraph
<b>VFK</b>	variable function key
<b>VFR</b>	very far range; visual flight rules
<b>VHF</b>	very high frequency
<b>VHF(A)</b>	very high frequency (acoustic)
<b>VHS</b>	vehicle handling system
<b>VI</b>	vertical insertion
<b>VIC</b>	vertical insertion commander
<b>VID</b>	visual identification information display; visual identification
<b>VIDS</b>	visual information display system
<b>VIDS/MAF</b>	visual information display system/maintenance action form
<b>VIM</b>	vibration isolation module
<b>VINSON</b>	secure voice
<b>VINT</b>	video integrate
<b>VIPS</b>	voice interruption priority system
<b>VISA</b>	voluntary intermodal sealift agreement program
<b>VISCAP</b>	visual combat air patrol
<b>VISINT</b>	visual intelligence
<b>VL</b>	vector logic; antiair warfare grid center
<b>VLA</b>	vertical launch antisubmarine rocket
<b>VLF</b>	very low frequency
<b>VLF(A)</b>	very low frequency (acoustic)
<b>VLS</b>	vertical launch system

<b>Vmax</b>	maximum velocity
<b>VMR</b>	volume movement report
<b>V-N</b>	velocity normal
<b>Vne</b>	velocity never exceed
<b>VO</b>	observation squadron (Navy)
<b>VOD</b>	vertical onboard delivery
<b>VOI</b>	vessel of interest
<b>VORTAC</b>	VHF omnidirectional range station/tactical air navigation
<b>VP</b>	land-based maritime patrol aircraft
<b>VPA</b>	voltage probe antenna
<b>VPAS</b>	fixed-wing computer assisted search
<b>VPF</b>	variable message format
<b>VPAS</b>	Vernier processor search aid
<b>VR</b>	voyage repair; vane rate
<b>VRS</b>	video recording system
<b>VS</b>	carrier-based patrol aircraft
<b>VSA</b>	vehicle stowage area
<b>VSBY</b>	visibility
<b>VSP</b>	Voith Schneider cycloidal propellers; variable speed pump
<b>VT</b>	volunteer training
<b>VTAS</b>	vertical target angle
<b>VTC</b>	vessel traffic control; vessel traffic center; video teleconferencing capability
<b>VTF</b>	variable time fragmentation
<b>VTO</b>	vertical takeoff
<b>VTOL</b>	vertical takeoff and landing
<b>VTR</b>	video tape recorder; video transfer range
<b>VTRF</b>	variable time radio frequency
<b>VTRF-NSD</b>	variable time radio frequency-non self-destruct

<b>VTs</b>	vessel traffic service
<b>VTSD</b>	variable time self-destruct
<b>VU</b>	volume unit
<b>VUL</b>	vulnerability
<b>VULREP</b>	vulnerability report
<b>VZR</b>	VLAD zone range
<b>VZW</b>	VLAD zone width
<b>W/G</b>	wire guidance
<b>W/L</b>	waterline
<b>W/O</b>	without
<b>WA/LD</b>	wide angle/low Doppler
<b>WAA</b>	wide aperture array
<b>WAC</b>	weapons assignment console; world aeronautical chart; world area code
<b>WACBE</b>	world area code basic encyclopedia; world aeronautical chart basic encyclopedia
<b>WAG</b>	world area grid
<b>WAGB</b>	icebreaker (USCG)
<b>WAH</b>	wide-angle homing
<b>WAN</b>	wide-area network
<b>WAP</b>	weapon assignment processor
<b>WARM</b>	war reserve modes
<b>WAS</b>	warhead add-on sensor; wide area surveillance; war at sea
<b>WASEX</b>	war-at-sea exercise
<b>WASP</b>	wide area surface picture; war air service program
<b>WATCHCON</b>	watch condition
<b>WB</b>	wideband
<b>WBA</b>	waterborne assault
<b>WBO</b>	wideband omnidirectional hydrophone
<b>WBSLC</b>	wideband sidelobe cancellation

<b>WBSV</b>	wideband secure voice
<b>WCA</b>	water clearance authority
<b>WCC</b>	weapons control console; weapon control coordinator
<b>WCF</b>	working capital fund
<b>WCF-T</b>	working capital fund-transportation
<b>WCO</b>	weapon control operator
<b>WCP</b>	weapons classification defects; weapons control panel; weapons control processor
<b>WCRP</b>	weapon control indicator panel; weapons control reference plane
<b>WCS</b>	weapons control system
<b>Wd</b>	damage width
<b>WDB</b>	world data bank
<b>WDE</b>	weapons directing equipment
<b>WDR</b>	war damage repair
<b>WDS</b>	weapons direction system
<b>WE</b>	weapon effectiveness
<b>WEC</b>	weapons engagement controller
<b>WEP</b>	weapon; weapon entry point; water entry point
<b>WEPEX</b>	weapons exercise
<b>WES</b>	warhead electronics system
<b>WEZ</b>	weapon engagement zone
<b>WGS</b>	World Geodetic System
<b>WGU</b>	weapon guidance unit
<b>WHE</b>	weight handling equipment
<b>WHEC</b>	high-endurance cutter (USCG)
<b>WIA</b>	wounded in action
<b>WIAC</b>	weapons integration and control
<b>WIN</b>	worldwide military command and control system (WWMCCS) intercomputer network

<b>WL</b>	waterline
<b>WLB</b>	seagoing buoy tender (USCG)
<b>WLC</b>	weapon launch console
<b>WLS</b>	workload share
<b>WMCCS</b>	worldwide military and command control system
<b>WMD</b>	weapons of mass destruction
<b>WMDT</b>	wartime medical decontamination team
<b>WMEC</b>	medium-endurance cutter (USCG)
<b>WNE</b>	weapon navigation error
<b>WOD</b>	wind over deck; word of the day
<b>WOG</b>	weapons order generator
<b>WP</b>	waypoint; white phosphorus; weapons posture
<b>WPA</b>	water jet propulsion assembly
<b>WPAL</b>	wartime personnel allowance
<b>WPB</b>	patrol boat (USCG); Coast Guard patrol boat
<b>WPN SAT</b>	weapons saturation
<b>WPOD</b>	water port of debarkation
<b>WPOE</b>	water port of embarkation
<b>WP PD</b>	white phosphorous point detonating
<b>WPS</b>	worldwide port system
<b>WPT</b>	waypoint
<b>WQC</b>	underwater telephone
<b>WR</b>	war reserve; weapon radius; weapon requirement
<b>WRA</b>	weapon replaceable assembly
<b>WRL</b>	weapons release limit
<b>WRM</b>	war reserve materiel
<b>WRMR</b>	war reserve munitions requirement
<b>WRP</b>	weapon release point

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<b>WRR</b>	weapons release range; weapons response range
<b>WSAT</b>	weapons system accuracy test
<b>WSES</b>	surface effect ship (USCG)
<b>WSF</b>	weapon system file
<b>WSM</b>	waterspace management
<b>WSRT</b>	weapon system readiness test
<b>WT</b>	gross weight; weight
<b>WTA</b>	water terminal authority
<b>WTCA</b>	water terminal clearance authority
<b>WTU</b>	weapons and tactics unit
<b>WVR</b>	within visual range
<b>WVS</b>	world vector shoreline
<b>WWC</b>	weapon control console
<b>WWMCCS</b>	worldwide military command and control system
<b>WX</b>	weather
<b>XBT</b>	expendable bathythermograph; expendable bathythermograph temperature; expendable bathythermograph transceiver
<b>XCOM</b>	exterior communication
<b>XCVR</b>	transceiver
<b>XHF</b>	extra high frequency
<b>XMFR RECT</b>	transformer rectifier
<b>XMIT</b>	transmission
<b>XMT</b>	exempt
<b>XO</b>	executive officer
<b>XPNDR</b>	transponder
<b>XSIT</b>	transit
<b>XTAL</b>	crystal
<b>XTK</b>	cross track angle

<b>YAG</b>	miscellaneous auxiliary (self-propelled)
<b>YC</b>	open lighter (non self-propelled)
<b>YCF</b>	car float (non self-propelled)
<b>YCV</b>	aircraft transportation lighter(non self-propelled)
<b>YD</b>	floating crane (non self-propelled)
<b>YDT</b>	diving tender (non self-propelled)
<b>YF</b>	covered lighter (self-propelled)
<b>YFB</b>	ferryboat of launch (self-propelled)
<b>YFD</b>	yard floating drydock (non self-propelled)
<b>YFN</b>	covered lighter (non self-propelled)
<b>YFNB</b>	large covered lighter (non self-propelled)
<b>YFND</b>	drydock companion craft (non self-propelled)
<b>YFNX</b>	lighter (special purpose) (non self-propelled)
<b>YFP</b>	floating power barge (non self-propelled)
<b>YFR</b>	refrigerated covered lighter (self-propelled)
<b>YFRN</b>	refrigerated covered lighter (non self-propelled)
<b>YFRT</b>	covered lighter (range-tender) (self-propelled)
<b>YFU</b>	harbor utility craft (self-propelled)
<b>YG</b>	garbage lighter (self-propelled)
<b>YGN</b>	garbage lighter (non self-propelled)
<b>YHLC</b>	salvage lift craft, heavy (non self-propelled)
<b>YLLC</b>	salvage lift craft, light (self-propelled)
<b>YM</b>	dredge (self-propelled)
<b>YMCL</b>	salvage lift craft, medium (non self-propelled)
<b>YNG</b>	gate craft (non self-propelled)
<b>YO</b>	fuel oil barge (self-propelled)
<b>YOG</b>	gasoline barge (self-propelled)
<b>YOGN</b>	gasoline barge (non self-propelled)



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<b>YON</b>	fuel oil barge (non self-propelled)
<b>YOS</b>	oil storage barge (non self-propelled)
<b>YP</b>	patrol craft (self-propelled)
<b>YPD</b>	floating pile driver (non self-propelled)
<b>YR</b>	floating workshop (non self-propelled)
<b>YRB</b>	repair and berthing barge (non self-propelled)
<b>YRBM</b>	repair, berthing, and messing barge (non self-propelled)
<b>YRDH</b>	floating drydock workshop (hull) (non self-propelled)
<b>YRDM</b>	floating drydock workshop (machine) (non self-propelled)
<b>YRR</b>	radiological repair barge (non self-propelled)
<b>YRST</b>	salvage craft tender (non self-propelled)
<b>YSR</b>	sludge removal barge (non self-propelled)
<b>YTB</b>	large harbor tug (self-propelled)
<b>YTL</b>	small harbor tug (self-propelled)
<b>YTM</b>	medium harbor tug (self-propelled)
<b>YW</b>	water barge (self-propelled)
<b>YWN</b>	water barge (non self-propelled)
<b>ZOF</b>	zone of fire
<b>ZPU</b>	antiaircraft gun towed
<b>ZULU</b>	Greenwich mean time
<b>ZZ</b>	force center

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